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DEPARTMENT OF THE INTERIOR
March 3 1849

ALABAMA GREAT SEAL

Water Resources Data
Alabama
Water Year 1989

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AL-89-1
Prepared in cooperation with the Alabama Department
of Environmental Management, the Alabama Highway
Department, and with other State, municipal,
and Federal agencies

CALENDAR FOR WATER YEAR 1989

1988

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DEPARTMENT OF THE INTERIOR
March 3 1849

Water Resources Data Alabama

Water Year 1989

by J.L. Pearman, F.C. Sedberry, V.E. Stricklin, and P.W. Cole

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AL-89-1

Prepared in cooperation with the Alabama Department
of Environmental Management, the Alabama Highway
Department, and with other State, municipal,
and Federal agencies

DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY

Dallas Peck, Director

For information on the water program in Alabama write to
District Chief, Water Resources Division
U.S. Geological Survey
520 19th Avenue
Tuscaloosa, Alabama 35401

1990

PREFACE

This volume of the annual hydrologic data report of Alabama is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by state, local, and federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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16. Abstract (Limit: 200 words)

Water resources data for the 1989 water year for Alabama consist of records of stae, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels in wells. This report includes records on both surface and ground water in the State. Specifically, it contains: (1) Discharge records for 92 streamflow-gaging stations, for 67 partial-record or miscellaneous streamflow stations; (2) stage and content records for 13 lakes and reservoirs and stage at 28 stations; (3) water-quality records for 27 streamflow-gaging stations, 2 lake stations, for 56 ungaged streamsites, and for 3 precipitation stations; (4) water temperature at 16 surface-water stations; and (5) water-level records for 20 observation wells. Discharge records for a few pertinent stations in bordering States are also included in this report.

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WATER RESOURCES DATA FOR ALABAMA, 1989

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State and Federal agencies, obtains a large amount of data pertaining to the water resources of Alabama each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Alabama."

This report includes records on both surface and ground water in the State. Specifically, it contains: (1) Discharge records for 92 streamflow-gaging stations, for 67 partial-record or miscellaneous streamflow stations; (2) stage and content records for 13 lakes and reservoirs and stage at 28 stations; (3) water-quality records for 27 streamflow-gaging stations, 2 lake stations, for 56 ungaged streamsites, and for 3 precipitation stations; (4) water temperature at 16 surface-water stations; and (5) water-level records for 20 observation wells. Discharge records for a few pertinent stations in bordering States are also included in this report.

This series of annual reports for Alabama began with the 1961 water year with a report that contained only data relating to the quantities of surface water. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several years concurrent with it, water-resources data for Alabama were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." For the 1961 through 1970 years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Distribution Branch, Text Products Section, U.S. Geological Survey, 604 South Pickett Street, Alexandria, VA 22304.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report AL-89-1." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (205) 752-8104.

COOPERATION

The U.S. Geological Survey and organizations of the State of Alabama have had cooperative agreements for the systematic collection of streamflow records since 1900. Cooperative agreements between the U.S. Geological Survey and the Geological Survey of Alabama for collection of streamflow records have been continuous since 1935. There have been cooperative agreements for the collection of ground-water level records since 1940, and for the collection of water-quality records since 1962. Organizations that assisted in collecting data for this report through cooperative agreements with the Survey are:

Alabama Department of Environmental Management - Leigh Pegues, Director
Alabama Highway Department - R. G. King, Director
Alabama Power Company
City of Birmingham, Waterworks Board - W. H. Wingate, Director
City of Huntsville, S. R. Hettinger, Mayor
City of Tuscaloosa - A. P. DuPont, Mayor
Coffee County Commission, B. N. Eagerton, Chairman
Corps of Engineers, U.S. Army
Geological Survey of Alabama - E. A. Mancini, State Geologist
Jefferson County Commission - David Orange, President
Tennessee Valley Authority

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow during the 1989 water year was above normal for most of Alabama except for the portion of the State south of a line from Mobile to Eufaula. Annual runoff for the 21 stations listed in table 1 ranged from 57 to 173 percent of long-term average flows. Mean annual flows were ranging from 118 to 173 percent of the long-term average in the northern part of the State, 87 to 134 percent in the central part, and 57 to 126 percent in the southern part.

In southern Alabama, the below normal flows in the summer of 1988 continued into the 1989 water year with below normal monthly mean discharges occurring from October until April. During the months of December through March, mean discharges were 30 to 75 percent of the long-term monthly means. Streamflow was near normal for May and was 2 to 6 times long-term means in June and July, due to near record rainfall in June and July. Streamflow in August and September was below normal with monthly mean discharges ranging from 30 to 80 percent of normal.

In central Alabama, monthly mean streamflows were below normal in October, December, February, and May. Monthly mean discharges in December were 30 to 60 percent of long-term means. Mean flows for the months of November, March, and June through September were above normal. The months of June and July had monthly mean discharges 3 to 8 times long-term means for those months. Flows in January were near normal.

In northern Alabama, above normal discharges that occurred at the end of September in the 1988 water year continued into the 1989 water year with monthly mean discharges in October and November approximately twice the long-term means. Above normal discharges occurred in the months of January, March, and June through September. Again, the near record rainfall in June and July produced monthly mean discharges 4 to 10 times long-term means. Monthly mean discharges in December, April, and May were below the long-term monthly mean discharges with the month of December 60 to 75 percent of the long-term means. Flows for February were near normal.

Annual peak flows were within historical extremes throughout the State except in the southern part where significant flooding occurred in the Baldwin County area during the month of June. During this flood, Fish River near Silver Hill had a record peak discharge with a recurrence interval of approximately 100 years. Relatively new gaging stations on Styx River and Blackwater River, which are in the same area, also had high peak discharges in June, although no previous record exists for these stations. At other stations in the State, annual peak discharges had recurrence intervals of less than 2 years with a few having 5 years as noted in table 1.

Base flow of streams throughout the State was higher in the 1989 water year than in the previous year with most stations having 7-day minimum flows with recurrence intervals less than 2 years. One exception was Chickasaw Creek near Kushla which had a 7-day minimum flow recurrence interval of approximately 20 years as listed in table 1. This was due to the lack of rainfall in that part of the State during the winter and early spring months.

Chemical quality of surface water in Alabama generally is suitable for most uses. Dissolved-solids concentrations in water in streams in 1989 were typically less than 200 mg/L except for streams in west-central Alabama where concentrations occasionally exceeded 500 mg/L. The pH of water in most streams was near 7.0 and the dissolved oxygen was seldom less than 4.0 mg/L. Trace constituent concentrations generally were low and similar to concentrations observed in previous years. Suspended-sediment concentrations were low except during periods of high streamflow.

Ground-water levels generally followed normal seasonal patterns throughout the year. The highest water levels generally occurred during March and April although some wells had higher than normal levels in June and July due to excessive rainfall throughout the State. The lowest water levels generally occurred during October or November. Figure 3 shows the lowest and highest monthly low water levels during water year 1989 with the highest and lowest monthly low water levels for the period of record for two observation wells.

The quality of ground water in Alabama varies between aquifers and within aquifers, but most of the State is underlain by one or more aquifers that can supply water suitable for most uses with little or no treatment. Dissolved-solids concentrations of water pumped from most aquifers are less than 500 mg/L. The pH of ground waters ranges from slightly less than 5.0 in Miocene aquifers to almost 9.0 in some ground waters from the Tuscaloosa aquifer system. Iron in solution is the most common problem in ground water in the State. This is particularly true of wells producing from the Coker, Gordo, and Pottsville aquifers. High chloride concentrations are present in water produced from all Coastal Plain aquifers underlying the Black Warrior River in an area extending from southern Tuscaloosa County to northern Marengo County.

Quality of precipitation in Alabama varies considerably between storms. Specific conductance values ranged from 2.0 to 85 microsiemens per centimeter, pH from 3.56 to 5.90, and sulfate concentration from 0.04 to 9.1 mg/L. The three quality of precipitation stations are located in rural areas in the northern, central, and southern sections of Alabama.

Table 1.--Mean, maximum, and minimum streamflow for water year 1989 and recurrence intervals at selected stations

			Mean		Maximum			
Station name	Station number	Length of record (years)	Yearly mean (ft³/s)	Percent of long-term average	Peak discharge (ft³/s)	Recurrence interval (years)	Lowest 7-day average (ft³/s)	Recurrence interval (years)
Uchee Creek near Fort Mitchell	02342500	43	544	126	9,750	<5	22	<2
Choctawhatchee River near Newton	02361000	59	554	57	3,410	<2	133	<5
Conecuh River at Brantley	02371500	52	693	106	7,090	<2	67	<2
Murder Creek at Evergreen	02374500	52	247	115	2,400	<2	104	<2
Fish River near Silver Hill	02378500	19	121	113	14,300	<100	61	<2
Big Wills Creek near Reece City	02401000	30	365	124	3,780	<2	50	<2
Kelly Creek near Vincent	02405500	21	419	134	8,070	<5	18	<2
Coosa River at Jordan Dam nr Wetumpka	02411000	65	17,970	111	88,300	<2	regulated	
Tallapoosa River near Heflin	02412000	37	594	87	6,680	<2	67	<5
Alabama River near Montgomery	02420000	62	26,350	111	176,000	<10	regulated	
Mulberry Creek at Jones	02422500	47	318	102	7,620	<5	70	<2
Cahaba River at Centreville	02424000	62	1,817	114	21,800	<2	194	<5
Sipsey River near Elrod	02446500	46	1,086	142	9,300	<5	95	<2
Sipsey Fork near Grayson	02450250	23	225	141	8,500	<5	6.1	<2
Locust Fork at Sayre	02456500	51	2,191	153	21,600	<2	119	<2
Black Warrior River at Northport	02465000	69	11,160	141	94,600	<2	regulated	
Tombigbee River at Demopolis L&D near Coatopa	02467000	61	34,320	149	161,000	<10	regulated	
Chickasaw Creek near Kushla	02471001	38	186	69	2,220	<2	44	<20
Paint Rock River near Woodville	03574500	53	884	132	7,780	<2	48	<2
Tennessee River at Whitesburg	03575500	65	50,070	118	183,000	<5	regulated	
Big Nance Creek at Courtland	03586500	42	461	173	6,450	<5	4.6	<2

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 411 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gasses. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1989 water year that began October 1, 1988, and ended September 30, 1989. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 4, 5, 6, 7, and 8. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indention in "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream order position in the list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 02371500, which appears just to the left of the station name includes the two-digit part number "02" plus the six-digit downstream order number "371500." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 2 (Eastern Gulf of Mexico Basin) and Part 3 (Ohio River Basin). All records for a drainage basin encompassing more than one state can be arranged in downstream order by assembling pages from the various state reports by station number to include all records in the basin.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells within a 1-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below.)

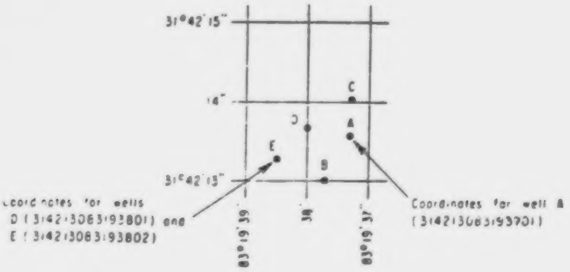
31°42'15"
14"
31°42'13"
C
D
A
E
B
Coordinates for wells D (314213083193801) and E (314213083193802)
Coordinates for well A (314213083193701)
83°19'39"
38"
83°19'37"

Figure 1.--System for numbering wells (latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharge may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record and crest-stage partial-record stations for which data are given in this report are shown in figures 4 and 6.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relations between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relations between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements or peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dam or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves, or tables defining the relations of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relations changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relations. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relations much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarity information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileage, given for only a few stations, were determined by methods given in "River Mileage Measurements," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will be identified by date in this paragraph of the station for water-discharge stations. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISION.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual Stage data reports are identified by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned, are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to three significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Records of discharge, not published by the U.S. Geological Survey, are collected in Alabama at several sites by the Geological Survey of Alabama, Jefferson County, the National Weather Service, Tennessee Valley Authority, and the U.S. Army Corps of Engineers. The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of these sites as well as an index of records of discharge collected by other agencies but not published by the U.S. Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Alabama District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 5.

In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989. Sulfate values in this report have not been corrected for this bias.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on site measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed on p. 17 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S.G.S. District office whose address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharge.

At stations where recording instruments are used, either mean temperature or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Sediment samples, samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratories in Arvada, Colo., or Ocala, Fla. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
e	Estimated value
K	Results based on colony counted outside the acceptable range (non-ideal colony count)
L	Value determined by central laboratory
r	Revised

Other Records Available

The Geological Survey of Alabama, Alabama Department of Environmental Management, Alabama Health Department, Alabama Power Company, U.S. Army Corps of Engineers, Tennessee Valley Authority, Environmental Protection Agency, and National Aeronautics and Space Administration and various county and city agencies have collected records of water quality at many sites in Alabama during the 1989 water year.

Records of Ground-Water Levels

Only water-level data from a national network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in Alabama are shown in figure 7.

Data Collection and Computation

The Geological Survey of Alabama, Alabama Health Department, U.S. Army Corps of Engineers, and Tennessee Valley Authority have collected water-level records and other information on many wells in Alabama during the 1989 water year.

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is a local well number that is provided for local needs.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of the water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plan that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and (or) screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequency measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring the trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained as a part of a special study in a specific area. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manual listed on a following page. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by county, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing the desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, used for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the weight or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for one hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural-water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Cubic feet per second per square mile ($[ft^3/s]/mi^2$) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, volume of fluids plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic average of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydraulic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent point from which the distance to the water surface in a well is measured to obtain the water level.

Micrograms per liter (UG/L, ug/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Observation well is a well tapping a representative aquifer for a selected area for the purpose of obtaining records of water-level fluctuations and or ground-water quality changes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population in terms of types, numbers, mass, or volume.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{-10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended-sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content in the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may even vary in the same source with changes in the composition of the water.

Spring is a place where ground water flows naturally from a rock or the soil onto the land surface or into a body of surface water. Its occurrence depends on the nature and relationship of rocks, especially permeable and impermeable strata, on the position of the water table, and on the topography.

Stage-discharge relation is the relation between gage height (stage) and the volume of water, per unit of time, flowing in a channel.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Tons per day (T/day) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1989, is called the "1989 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and Warren E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3. Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.

3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A12. *Fluorometric procedures for dye tracing*, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.

3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.

3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.

3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F. A. Kilpatrick, R. E. Rathbun, N. Yotsukura, G. W. Parker, and L. L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.

3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS-TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. J. Fishman and L. C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R. L. Wershaw, M. J. Fishman, R. R. Grabbe, and L. E. Lowe: USGS--TWRI Book 5, Chapter A3. 1987. 80 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P. E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffrannek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

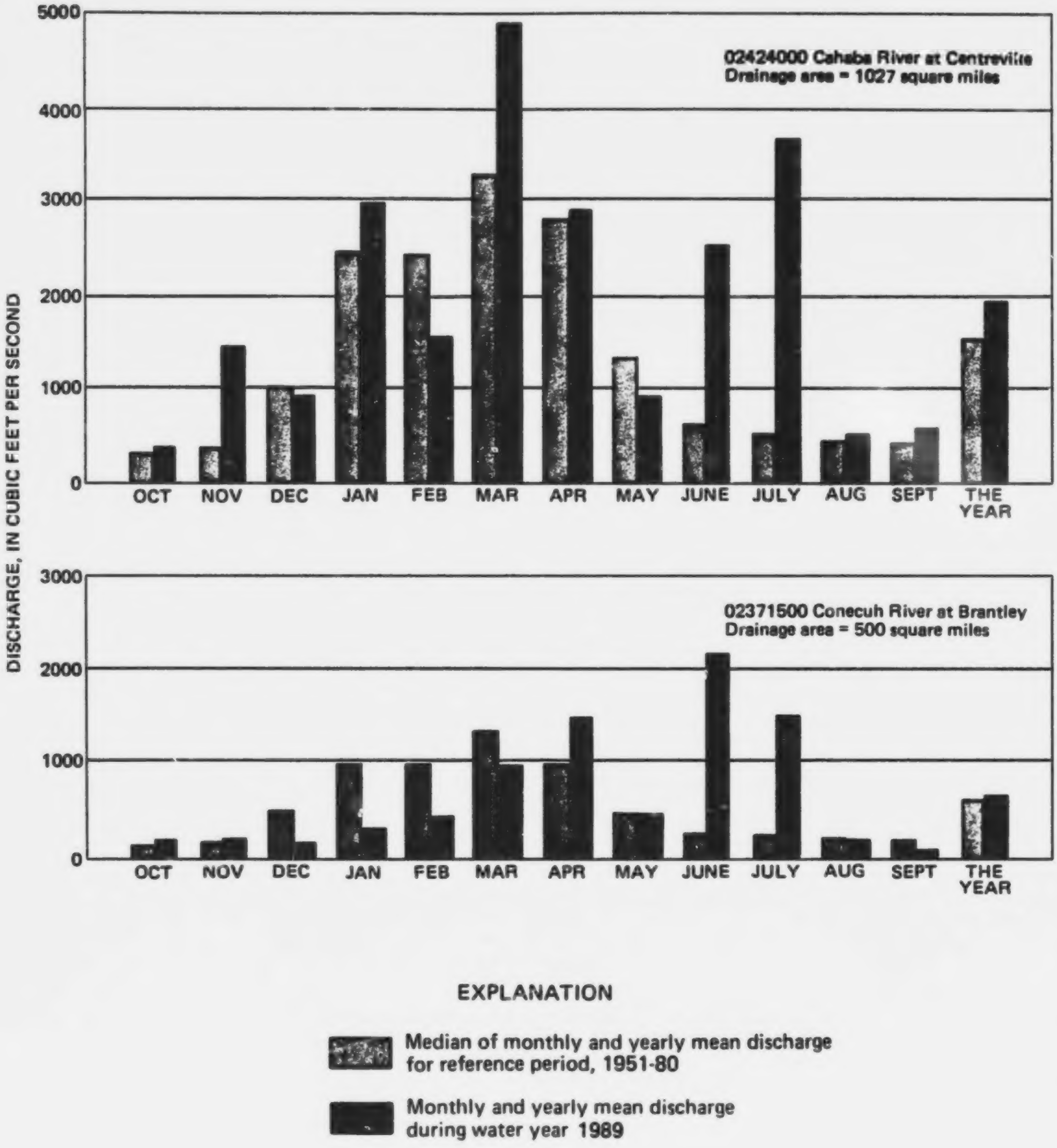

Figure 2.--Comparison of discharge for water year 1989 to the base period 1951-1980 at two long-term representative gaging stations.

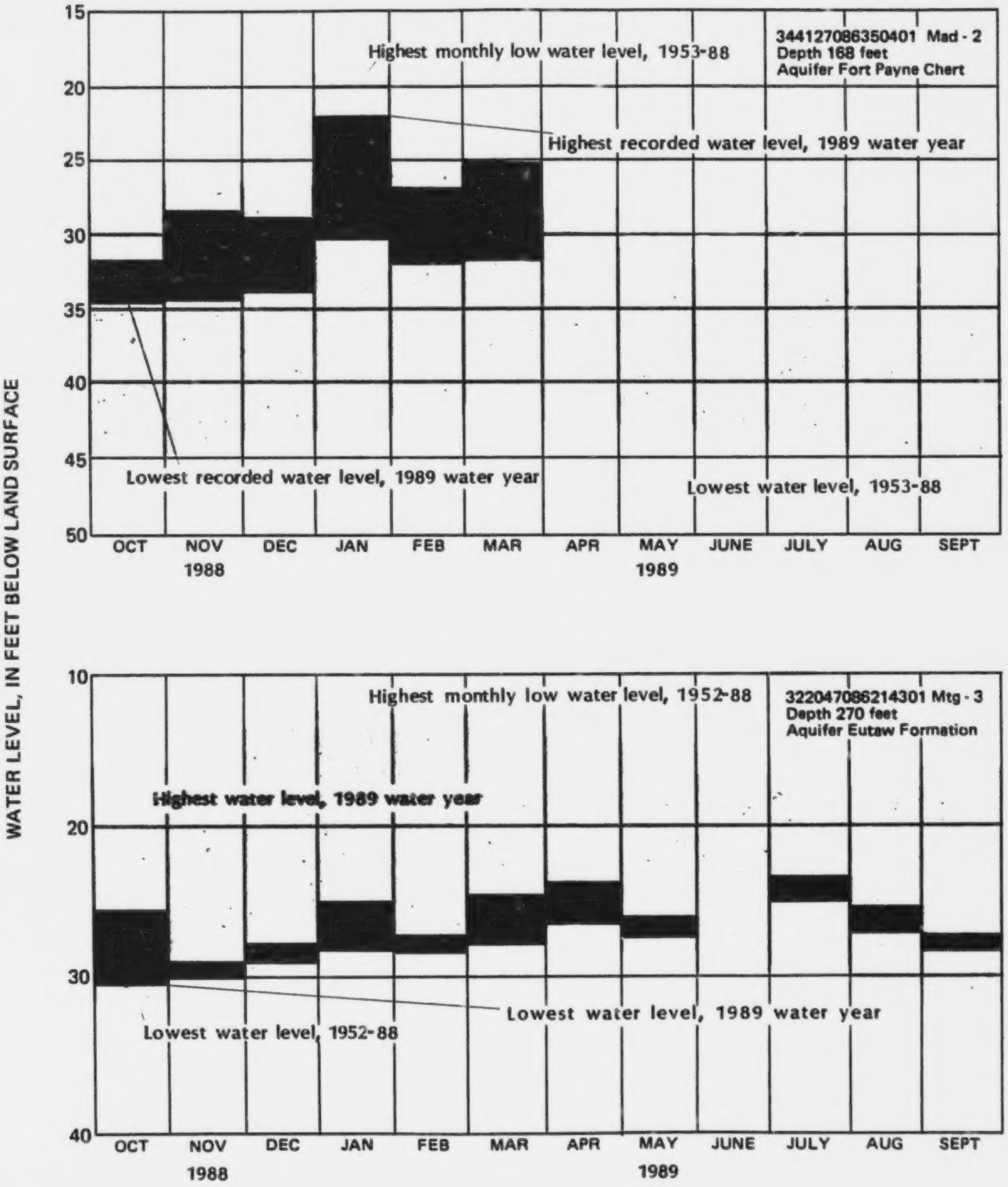

Figure 3.--Comparison of monthly low water levels for water year 1989 to the highest and lowest monthly low water levels for the period of record for two observation wells.

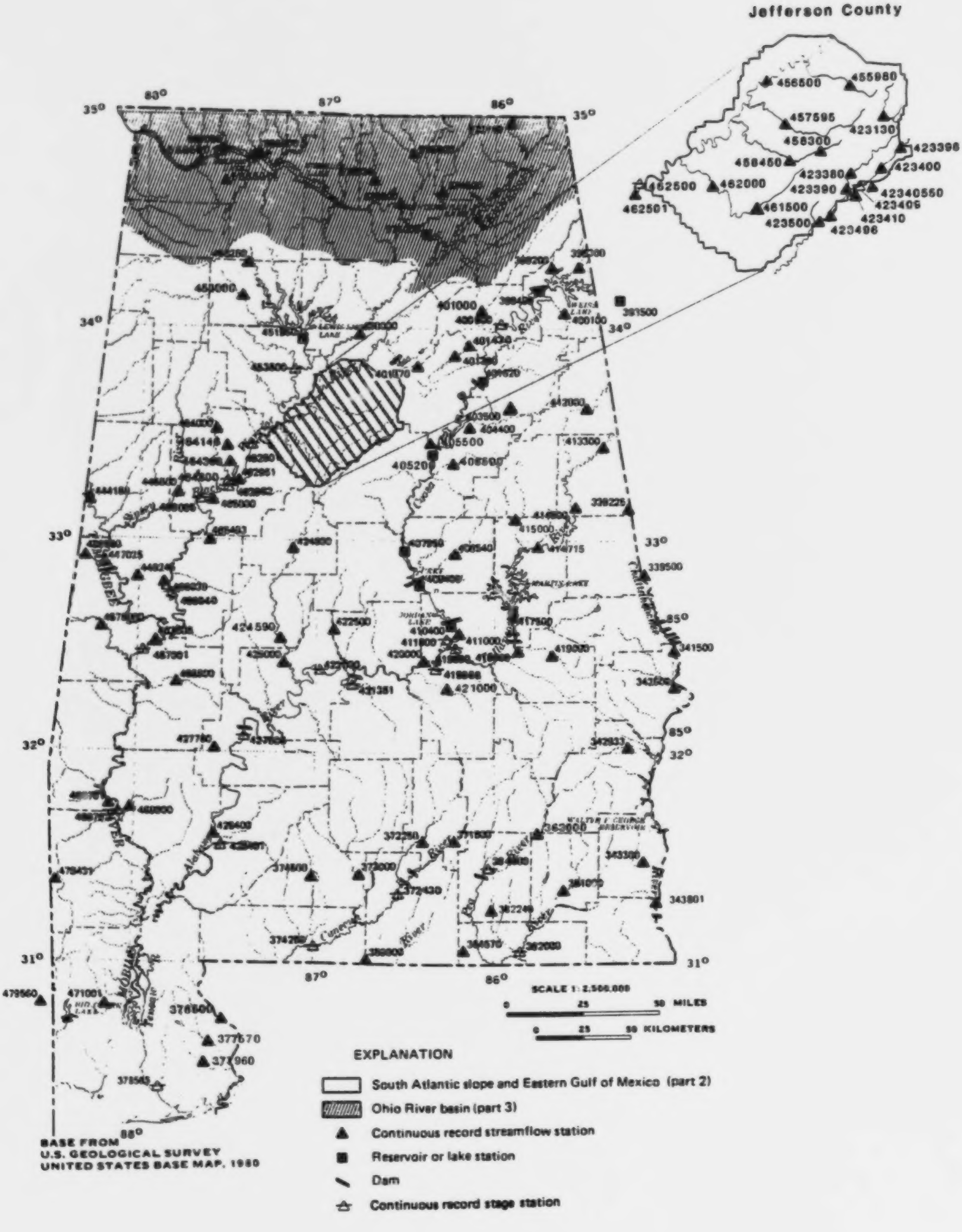
Jefferson County
456500
455980
457595
423130
458300
423398
458450
423400
462500
462000
423380
423390
42340550
462501
461500
423406
423410
423500
423408
35°
88°
87°
86°
35°
34°
34°
33°
33°
85°
32°
85°
32°
31°
87°
86°
31°
88°
391500
339500
341500
343801
479560
376500
377570
377960
SCALE 1:2,500,000
0 25 50 MILES
0 25 50 KILOMETERS
EXPLANATION
South Atlantic slope and Eastern Gulf of Mexico (part 2)
Ohio River basin (part 3)
Continuous record streamflow station
Reservoir or lake station
Dam
Continuous record stage station
BASE FROM
U.S. GEOLOGICAL SURVEY
UNITED STATES BASE MAP, 1980

Figure 4.--Location of gaging stations.

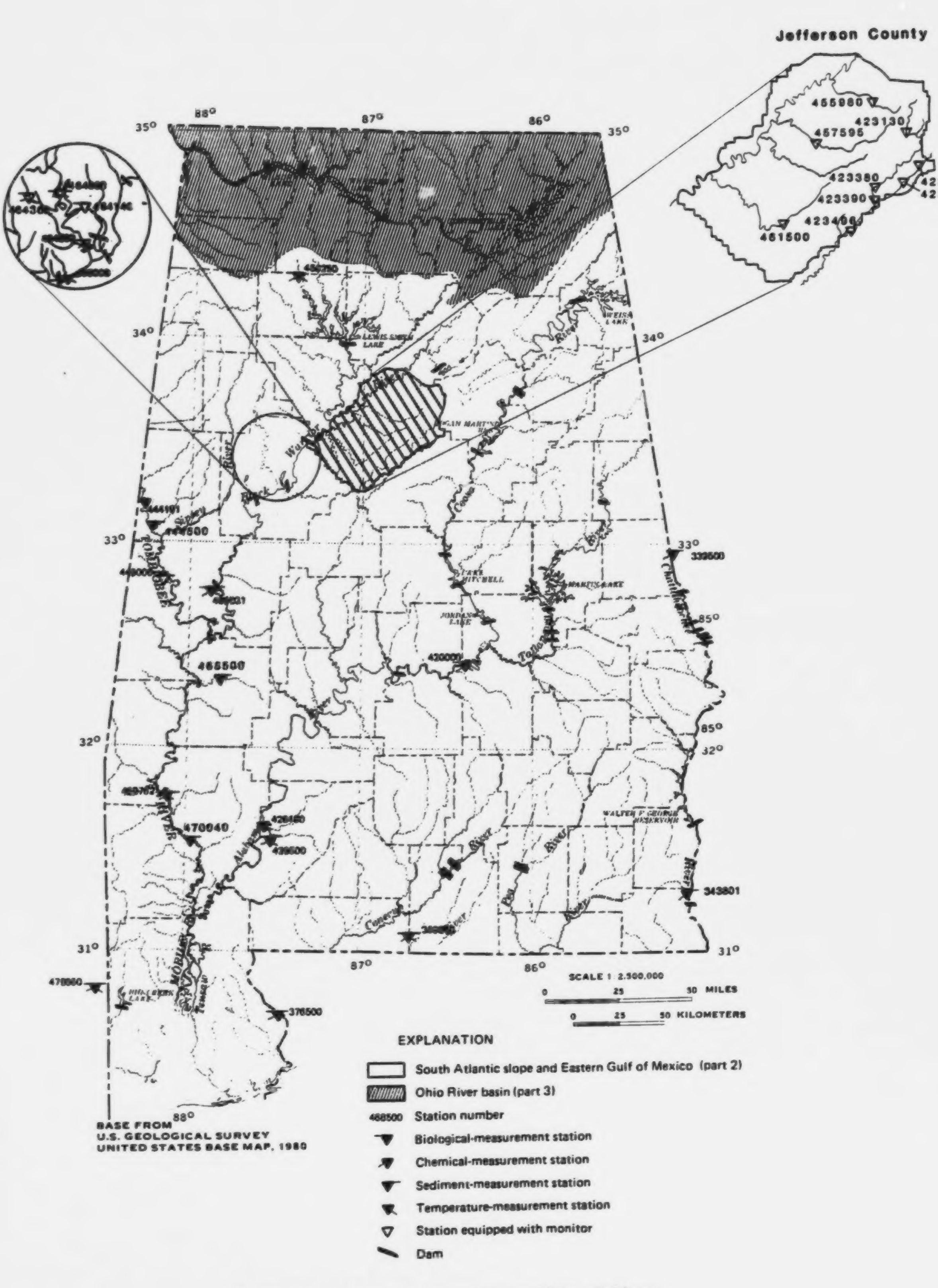
Jefferson County
455980
423130
457595
423380
423398
423400
423390
423400
461500
88°
87°
86°
35°
35°
34°
34°
33°
33°
32°
32°
31°
31°
85°
85°
87°
86°
88°
456250
LEWIS SMITH LAKE
WEISS LAKE
LOGAN MARTIN
444101
444500
448000
466931
465500
420000
LAKE MITCHELL
JORDAN LAKE
MARTIN LAKE
339500
WALTER F GEORGE RESERVOIR
429760
470040
426450
428600
343801
380000
478960
376500
SCALE 1:2,500,000
0 25 50 MILES
0 25 50 KILOMETERS
BASE FROM
U.S. GEOLOGICAL SURVEY
UNITED STATES BASE MAP, 1980
EXPLANATION
South Atlantic slope and Eastern Gulf of Mexico (part 2)
Ohio River basin (part 3)
468500 Station number
Biological-measurement station
Chemical-measurement station
Sediment-measurement station
Temperature-measurement station
Station equipped with monitor
Dam

Figure 5.--Location of water-quality stations.

02339225 WEHADKEE CREEK BELOW ROCK MILLS, AL

LOCATION.--Lat 33°07'20", long 85°14'57", in NE¼NW¼ sec. 12, T. 22 S., R. 13 E., Randolph County, Hydrologic Unit 03130002, on left bank 50 ft downstream of bridge on county road, 0.7 mi downstream from Little Wehadkee Creek, 2.1 mi upstream from Guss Creek, and 3.5 mi southeast of Rock Mills.

DRAINAGE AREA.--60.2 mi^2.

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 647.21 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-5, June 22 to Aug. 10. Records good except those for periods of estimated record, which are poor. Some diurnal fluctuation at low flow. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--11 years, 84.9 ft^3/s, 19.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,390 ft^3/s, Feb. 3, 1982, gage height, 14.42 ft; minimum daily discharge, 2.4 ft^3/s, Oct. 3, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 21	1900	1,140	8.82	Apr. 5	1330	1,960	10.49
Mar. 23	2000	1,160	8.90	June 21	0230	*3,540	*12.08

Minimum daily discharge, 27 ft^3/s, June 2, 3, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e30	41	59	114	45	93	120	78	29	e90	e120	89
2	e50	35	54	69	43	84	106	90	27	e100	e100	59
3	e150	32	51	77	42	87	102	62	27	e150	e90	46
4	e60	62	49	75	42	76	160	57	29	e220	e80	41
5	e40	306	46	59	51	90	1370	63	41	e600	e70	36
6	36	96	45	56	52	460	449	72	52	e450	e62	36
7	34	62	44	53	68	181	253	55	41	e300	e55	38
8	33	55	44	51	63	136	203	52	36	e180	e52	36
9	32	55	43	48	51	115	416	59	45	e140	e48	34
10	31	49	42	48	47	104	398	207	38	e120	e45	32
11	30	46	43	48	46	97	289	82	32	e100	43	34
12	29	42	42	49	45	90	210	61	30	e90	42	33
13	28	55	40	115	43	85	174	54	29	e120	41	31
14	28	50	40	88	42	81	151	52	27	e100	53	29
15	28	45	40	88	41	78	185	54	122	e140	438	179
16	28	44	43	73	41	76	147	49	490	e130	126	343
17	28	56	40	63	40	71	123	45	419	e120	82	69
18	28	47	38	58	42	70	109	42	100	e100	93	50
19	32	43	38	55	48	66	103	41	222	e140	66	43
20	30	56	38	56	55	64	98	47	1400	e400	56	40
21	40	55	38	52	606	306	90	48	2160	e700	51	38
22	38	46	38	48	285	384	85	41	e750	e600	48	59
23	31	43	38	47	132	731	79	58	e450	e900	53	48
24	30	41	38	46	98	490	75	51	e700	e800	46	41
25	29	40	37	44	83	246	72	39	e500	e450	41	154
26	28	39	35	43	76	182	68	36	e300	e350	40	378
27	29	107	34	44	71	149	65	34	e200	e270	57	106
28	29	140	39	42	115	132	61	32	e150	e220	43	75
29	33	81	40	41	---	117	58	33	e120	e190	41	73
30	36	66	38	49	---	234	57	30	e100	e160	47	149
31	34	---	93	53	---	151	---	30	---	e140	83	---
TOTAL	1142	1935	1347	1852	2413	5326	5876	1754	8666	8570	2312	2419
MEAN	36.8	64.5	43.5	59.7	86.2	172	196	56.6	289	276	74.6	80.6
MAX	150	306	93	115	606	731	1370	207	2160	900	438	378
MIN	28	32	34	41	40	64	57	30	27	90	40	29
CFSM	.61	1.07	.72	.99	1.43	2.85	3.25	.94	4.80	4.59	1.24	1.34
IN.	.71	1.20	.83	1.14	1.49	3.29	3.63	1.08	5.36	5.30	1.43	1.49

CAL YR 1988 TOTAL 24176.6 MEAN 66.1 MAX 2500 MIN 5.6 CFSM 1.10 IN. 14.94
WTR YR 1989 TOTAL 43612 MEAN 119 MAX 2160 MIN 27 CFSM 1.98 IN. 26.95

e Estimated

02339500 CHATTAHOOCHEE RIVER AT WEST POINT, GA

LOCATION.--Lat 32°53'10", long 85°10'56", Troup County, Hydrologic Unit 03130002, on right bank just downstream from Oseligee Creek at West Point, 1 mi upstream from bridge on U.S. Highway 29, 2.5 mi downstream from West Point Dam, and at mile 198.9.

DRAINAGE AREA.--3,550 mi^2, approximately.

PERIOD OF RECORD.--August 1896 to current year. Gage-height records collected at site 0.8 mi downstream since 1899 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 682: 1920, drainage area. WSP 972: 1931-32. WSP 1504: 1912, 1916-17.

GAGE.--Water-stage recorder. Datum of gage is 551.67 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 20, 1912, nonrecording gage at site 0.8 mi downstream at datum 2.83 ft lower. Oct. 20, 1912, to Jan. 25, 1925, nonrecording gage at site 500 ft upstream at present datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Sidney Lanier since January 1956 and by West Point Lake since October 1974.

AVERAGE DISCHARGE.--93 years, 5,543 ft^3/s, 21.20 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 134,000 ft^3/s, Dec. 10, 1919, gage height, 30.0 ft at site then in use; 29.25 ft at present site, from floodmarks, from rating curve extended above 80,000 ft^3/s on basis of computation of peak flow over Langdale Dam; minimum, 224 ft^3/s, Sept. 12, 1925, gage height, 1.64 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1827, that of Dec. 10, 1919. Flood in 1886 reached a stage of 25.6 ft at former site and datum, from floodmark, by National Weather Service, discharge, 92,800 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,000 ft^3/s, June 21, gage height, 13.56 ft; minimum daily, 619 ft^3/s, Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	630	4980	2790	1120	4720	3930	856	3350	5240	863	7010	7140
2	646	5150	2790	4520	4770	4000	837	3400	4010	894	4520	773
3	2470	5090	793	3120	4820	4060	5260	3370	789	3400	5110	745
4	4900	3250	769	2400	834	1470	5330	3310	798	5690	5110	5780
5	4890	748	4710	2240	822	1180	8150	3340	3950	6100	757	5810
6	4920	762	4870	2230	2910	3590	13000	780	3010	7410	752	5790
7	4910	5170	4920	1050	2890	3670	12600	771	4060	7230	7570	5810
8	643	5180	4970	821	2880	3510	6810	3940	4000	7160	5120	5820
9	677	5180	4990	2170	3200	3470	6100	4180	3940	7100	7570	725
10	3040	5220	803	2340	4990	3440	8760	4190	833	4840	7600	712
11	3050	5200	779	2140	810	842	8800	4210	810	4590	7610	5740
12	3080	728	3550	2160	808	831	8620	4190	5170	4640	3830	5790
13	3040	712	3570	2310	2220	5200	8540	1010	5190	6990	3830	6420
14	3040	5540	3580	971	2150	5320	8510	1000	2880	7000	7000	6440
15	621	5680	3600	908	2150	5310	1070	2300	2930	926	7090	6460
16	619	5730	3610	2240	2150	5260	1030	2330	3310	909	7070	687
17	4300	5730	794	2240	2150	5280	4070	2300	2360	7680	896	682
18	4340	5810	1090	2280	816	886	4030	2280	1240	8820	762	7050
19	4320	856	4270	2200	820	794	4010	2210	5240	8490	751	7060
20	4570	736	4470	2450	4230	3350	4050	758	14400	8690	745	7070
21	4480	3980	4470	1360	4410	3440	4010	764	27700	16100	6350	7100
22	664	4040	4390	1350	4740	3520	829	3880	27300	10400	6340	7120
23	637	4090	4390	1350	4280	3800	803	3950	21300	7120	8370	704
24	4950	4140	787	3090	4180	3910	2700	3970	13200	7630	8290	687
25	4970	4180	780	6220	871	990	2680	3990	9840	7660	8260	7190
26	4990	761	4300	6170	855	899	2680	4010	6530	7660	755	7660
27	4980	893	4370	6200	3470	3380	3330	789	6010	7610	739	8750
28	5060	3080	2200	845	3500	3370	3960	774	5290	7670	7060	7140
29	651	2890	3660	817	---	3360	786	3960	5290	806	6990	7120
30	635	2810	4420	5400	---	3460	781	4200	5240	778	7060	1020
31	5020	---	921	5520	---	3460	---	5200	---	3860	6770	---
TOTAL	95743	108316	96406	80232	77446	98982	142992	88706	201860	186716	157687	146995
MEAN	3088	3611	3110	2588	2766	3193	4766	2861	6729	6023	5087	4900
MAX	5060	5810	4990	6220	4990	5320	13000	5200	27700	16100	8370	8750
MIN	619	712	769	817	808	794	781	758	789	778	739	682
CFSM	.87	1.02	.88	.73	.78	.90	1.34	.81	1.90	1.70	1.43	1.38
IN.	1.00	1.14	1.01	.84	.81	1.04	1.50	.93	2.12	1.96	1.65	1.54

CAL YR 1988 TOTAL 1021455 MEAN 2791 MAX 11200 MIN 576 CFSM .79 IN 10.70
WTR YR 1989 TOTAL 1482081 MEAN 4060 MAX 27700 MIN 619 CFSM 1.14 IN 15.53

02339500 CHATTAHOOCHEE RIVER AT WEST POINT, GA--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.92	4.20	3.18	2.50	4.18	3.83	2.30	3.53	4.39	2.26	5.15	5.21
2	1.95	4.34	3.17	4.10	4.20	3.86	2.28	3.58	3.82	2.29	4.00	2.15
3	2.94	4.28	2.17	3.43	4.21	3.91	4.45	3.55	2.25	3.55	4.27	2.11
4	4.09	3.33	2.14	3.06	2.23	2.63	4.49	3.51	2.26	4.74	4.26	4.55
5	4.09	2.11	4.14	2.95	2.22	2.47	5.81	3.52	3.91	4.94	2.13	4.56
6	4.09	2.13	4.23	2.94	3.32	3.70	7.91	2.26	3.43	5.42	2.12	4.55
7	4.09	4.34	4.24	2.42	3.31	3.76	7.77	2.25	3.99	5.31	5.41	4.56
8	1.94	4.35	4.28	2.21	3.30	3.64	5.22	3.88	3.94	5.27	4.34	4.56
9	1.97	4.35	4.28	2.91	3.45	3.61	4.89	4.02	3.91	5.23	5.41	2.08
10	3.17	4.37	2.18	3.04	4.28	3.59	6.09	4.03	2.28	4.19	5.42	2.06
11	3.18	4.36	2.16	2.90	2.20	2.26	6.12	3.99	2.25	4.06	5.42	4.52
12	3.21	2.08	3.60	2.90	2.20	2.25	6.03	4.03	4.52	4.09	3.65	4.54
13	3.27	2.06	3.61	3.03	2.93	4.39	5.98	2.49	4.54	5.18	3.64	4.83
14	3.26	4.67	3.62	2.37	2.95	4.47	5.96	2.49	3.38	5.18	5.12	4.84
15	1.90	4.76	3.62	2.31	2.90	4.46	2.50	3.12	3.37	2.32	5.19	4.84
16	1.90	4.79	3.63	2.98	2.90	4.44	2.47	3.14	3.63	2.31	5.18	2.02
17	3.77	4.79	2.18	2.97	2.89	4.45	3.92	3.13	3.27	5.49	2.25	2.02
18	3.81	4.83	2.36	3.02	2.21	2.28	3.91	3.12	2.60	5.98	2.13	5.12
19	3.79	2.19	3.97	2.94	2.21	2.21	3.89	3.07	4.55	5.90	2.12	5.13
20	3.97	2.10	4.03	3.16	3.94	3.54	3.92	2.26	8.31	5.91	2.11	5.13
21	4.00	3.78	4.02	2.69	4.06	3.60	3.89	2.27	13.16	9.26	4.83	5.14
22	1.97	3.82	3.99	2.68	4.29	3.67	2.30	3.78	13.03	6.81	4.82	5.15
23	1.93	3.84	3.99	2.68	4.01	3.84	2.27	3.82	11.08	5.23	5.77	2.05
24	4.19	3.86	2.17	3.54	3.94	3.93	3.21	3.85	8.03	5.46	5.74	2.02
25	4.22	3.87	2.16	4.90	2.27	2.42	3.20	3.83	6.55	5.48	5.73	5.18
26	4.22	2.13	3.94	4.85	2.25	2.34	3.20	3.84	4.98	5.47	2.11	5.55
27	4.22	2.28	3.98	4.86	3.59	3.59	3.53	2.28	4.74	5.45	2.10	6.03
28	4.27	3.43	2.90	2.24	3.61	3.58	3.79	2.26	4.39	5.47	5.16	5.27
29	1.95	3.28	3.58	2.21	---	3.57	2.26	3.80	4.38	2.19	5.13	5.25
30	1.93	3.20	4.00	4.48	---	3.64	2.25	3.94	4.36	2.16	5.15	2.37
31	4.24	---	2.32	4.55	---	3.66	---	4.38	---	3.68	5.01	---
MEAN	3.21	3.60	3.35	3.16	3.22	3.47	4.19	3.32	4.98	4.72	4.22	4.11
MAX	4.27	4.83	4.28	4.90	4.29	4.47	7.91	4.38	13.16	9.26	5.77	6.03
MIN	1.90	2.06	2.14	2.21	2.20	2.21	2.25	2.25	2.25	2.16	2.10	2.02

WTR YR 1989 MEAN 3.80 MAX 13.16 MIN 1.90

02341500 CHATTAHOOCHEE RIVER AT COLUMBUS, GA

LOCATION.--Lat 32°27'45", long 84°59'52", Muscogee County, Ga.-Russell County, Ala., Hydrologic Unit 03130003, on downstream side of center pier of Central of Georgia railway bridge at Columbus, 0.5 mi downstream from Eagle and Phenix Dam, 1.2 mi downstream from City Mills Dam, 2.6 mi downstream from North Highlands Dam, 3.3 mi downstream from Oliver Dam, 17.5 mi downstream from Bartletts Ferry Dam, and at mile 159.9.

DRAINAGE AREA.--4,670 mi^2, approximately.

PERIOD OF RECORD.--August 1929 to current year. Records for December 1912, published in WSP 322, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1082: 1943(M). See also period of record.

GAGE.--Water-stage recorder. Datum of gage is 183.14 ft above National Geodetic Vertical Datum of 1929. Dec. 1-31, 1912, nonrecording gage at site 800 ft upstream at datum 2.0 ft higher, and Aug. 23, 1929, to Sept. 30, 1975, recording gage at present site, at datum 2.0 ft higher. Oct. 1, 1963, to Sept. 30, 1966, water-stage recorder at Walter F. George Reservoir, and since Oct. 1, 1966, water-stage recorder at Alabama State Docks used as auxiliary gage for this station.

REMARKS.--Estimated daily discharges: Jan. 9 to Feb. 10. Records fair except those below 2,500 ft^3/s and those for period of estimated record, which are poor. Flow regulated by Lake Sidney Lanier since January 1956, West Point Lake since October 1974, and by Lake Harding since 1939. Records of chemical analyses for the period February 1968 to May 1972 are published in reports of the U.S. Geological Survey.

AVERAGE DISCHARGE.--60 years, 6,671 ft^3/s, 19.40 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 145,000 ft^3/s, Feb. 26, 1961; maximum gage height, 47.8 ft, Feb. 25, 1961; minimum discharge, 294 ft^3/s, Oct. 23, Nov. 14, 1931; minimum daily, 480 ft^3/s Oct. 31, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known since at least 1827, 198,000 ft^3/s, Mar. 15, 1929, computation of flow at North Highlands Dam before redevelopment; maximum stage known, 53.2 ft, Mar. 16, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 45,000 ft^3/s, June 22; maximum gage height, 21.24 ft; minimum daily discharge, 1,160 ft^3/s, Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1560	5310	3550	5620	5400	4580	3400	7430	6820	3580	7240	8390
2	1620	5480	2720	5450	4900	5460	2540	5970	4300	2870	6550	2000
3	1840	4590	1630	5430	4700	7070	5900	5230	1970	14900	4960	1860
4	5300	3980	1520	2410	1600	4940	7990	4690	1660	22300	6130	7070
5	6530	2370	4490	3030	1600	2390	17000	3950	4450	23300	2550	6430
6	3940	1350	4640	2810	2100	4880	25000	2960	3470	12400	1650	6930
7	1230	5200	5140	2270	2100	5440	18300	1750	4780	15100	8300	7560
8	1260	5320	5500	1970	2200	5340	17900	4390	4550	11300	7350	6390
9	1180	5710	4630	3100	2200	4650	14600	5620	4990	9030	6140	2270
10	1300	5540	2200	2200	4600	3120	15900	4540	2140	6700	7670	1660
11	2010	4270	1820	2200	2050	2270	15900	4680	2940	5270	7690	5840
12	2680	2060	2960	2400	1310	3350	15700	6130	5080	7400	7830	5950
13	3500	1300	3450	1700	2240	5480	13500	1730	5140	9250	6610	7300
14	1730	5290	3830	1300	1670	5420	13400	2420	3670	8250	6740	7290
15	1460	6390	3410	1600	1630	5630	4600	2810	4970	4470	7050	6710
16	1320	6710	3510	2200	2480	6120	4850	2380	9850	5170	12800	1850
17	3900	5930	1880	2500	2530	6020	6240	3420	4520	8160	2190	1580
18	4400	5740	2060	2700	1710	2780	6430	2860	4280	11200	1730	6880
19	4910	1790	4530	2400	1250	1970	5870	2410	7140	10200	1630	7200
20	4100	1630	4640	1900	4110	4390	5980	2040	13800	12800	1690	7740
21	4140	4270	4450	2200	6390	5250	5290	1960	38500	25700	1870	8110
22	1160	4720	4000	1600	6180	5880	2750	4600	41700	19000	5930	7330
23	1530	4230	4070	1700	5120	10400	2560	3890	34200	12400	7620	1910
24	4330	4490	2590	3500	4540	8020	5240	4560	23700	8180	7770	1790
25	5230	4290	2310	5200	2190	4630	5130	4990	14600	12600	10700	7850
26	4620	1510	3450	6000	1390	2120	2680	4780	7810	10800	3110	9050
27	4780	3160	4900	6000	4380	3640	2860	1690	7680	10600	2080	10300
28	4560	4630	2730	1300	4750	5790	5160	2010	7140	7100	6900	9890
29	1230	4810	2580	2000	---	5590	1840	4880	6290	2710	8530	7890
30	1740	4820	4480	4100	---	5520	2090	3480	6190	2270	8450	4880
31	5090	---	5480	6000	---	4820	---	6120	---	4660	8320	---
TOTAL	94180	126890	109150	94790	87320	152960	256600	120370	288330	319670	185780	177900
MEAN	3038	4230	3521	3058	3119	4934	8553	3883	9611	10310	5993	5930
MAX	6530	6710	5500	6000	6390	10400	25000	7430	41700	25700	12800	10300
MIN	1160	1300	1520	1300	1250	1970	1840	1690	1660	2270	1630	1580
CFSM	.65	.91	.75	.66	.67	1.06	1.83	.83	2.06	2.21	1.28	1.27
IN.	.75	1.01	.87	.76	.70	1.22	2.04	.96	2.30	2.55	1.48	1.42

CAL YR 1988 TOTAL 1335210 MEAN 3648 MAX 16600 MIN 1100 CFSM .78 IN 10.64
WTR YR 1989 TOTAL 2013940 MEAN 5518 MAX 41700 MIN 1160 CFSM 1.18 IN 16.04

02341500 CHATTAHOOCHEE RIVER AT COLUMBUS, GA--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.96	5.94	4.59	5.72	---	5.38	6.68	7.80	6.52	7.31	8.26	7.82
2	6.06	6.04	3.90	5.82	---	5.93	6.62	7.91	5.65	7.17	8.23	4.82
3	6.21	5.54	3.14	5.79	---	6.96	7.83	7.51	4.19	11.73	7.59	4.80
4	7.26	5.08	3.10	4.14	---	6.23	8.56	7.26	3.96	15.54	7.90	7.01
5	7.69	4.27	4.90	4.34	---	5.56	12.68	7.16	5.39	15.77	6.79	6.87
6	6.85	3.91	5.10	4.18	---	7.09	15.58	6.60	4.91	11.80	6.58	6.90
7	5.90	5.84	5.29	3.66	---	7.24	13.22	6.37	5.48	12.02	8.71	7.01
8	5.82	5.89	5.42	3.65	---	7.13	12.72	7.11	5.53	10.37	8.55	6.67
9	5.88	6.18	4.87	---	---	6.83	12.01	7.61	5.89	9.47	7.82	4.98
10	5.91	5.98	3.31	---	---	6.23	12.85	7.11	4.76	8.79	8.36	4.78
11	5.87	5.37	3.08	---	2.92	5.86	12.60	7.19	5.25	8.17	8.28	6.71
12	5.81	3.90	4.00	---	2.44	6.36	12.06	7.61	6.34	8.71	8.36	6.61
13	5.78	3.66	4.30	---	3.19	7.28	10.95	6.16	6.58	9.31	8.34	6.97
14	5.02	5.68	4.41	---	2.83	7.45	10.75	6.48	6.11	9.19	8.43	7.11
15	4.80	6.19	4.21	---	2.72	7.35	7.85	6.66	6.67	7.91	8.42	6.72
16	4.84	6.27	4.17	---	3.08	7.39	7.72	6.27	9.11	8.37	10.74	4.28
17	5.94	5.87	3.13	---	3.05	7.34	8.16	6.41	7.68	9.39	6.85	4.11
18	6.05	5.98	3.33	---	2.37	6.24	8.13	6.10	7.66	10.30	6.15	6.68
19	6.10	4.05	4.85	---	2.08	6.02	7.78	5.68	8.77	9.88	5.75	6.76
20	5.72	4.01	4.97	---	4.20	6.93	7.62	5.39	11.06	10.76	5.87	6.87
21	5.65	5.39	4.77	---	5.97	7.29	7.27	5.25	19.41	15.69	5.79	6.91
22	4.22	5.46	4.41	---	6.15	7.68	6.34	6.37	20.54	13.42	7.09	6.83
23	4.42	5.13	4.47	---	5.70	9.74	6.49	6.00	18.91	10.86	7.55	3.49
24	5.57	5.18	3.41	---	5.11	9.60	7.45	6.15	15.10	9.49	7.54	3.38
25	6.04	4.94	3.35	---	3.73	8.18	7.22	6.32	11.72	10.73	8.87	6.55
26	5.72	3.41	4.16	---	3.45	6.66	6.39	6.19	8.91	10.00	5.78	7.44
27	5.73	4.43	4.99	---	5.18	6.79	6.18	4.76	8.60	9.84	5.29	8.09
28	5.46	5.35	3.83	---	5.43	7.50	6.82	4.80	8.46	8.66	7.18	7.94
29	3.63	5.39	3.46	---	---	7.44	5.70	5.98	8.28	6.90	7.89	7.00
30	3.90	5.30	4.54	---	---	7.51	5.54	5.34	8.22	6.79	7.79	5.01
31	5.77	---	5.20	---	---	7.32	---	6.35	---	7.59	7.68	---
MEAN	5.66	5.19	4.21	---	---	7.05	8.93	6.45	8.52	10.06	7.56	6.24
MAX	7.69	6.27	5.42	---	---	9.74	15.58	7.91	20.54	15.77	10.74	8.09
MIN	3.63	3.41	3.08	---	---	5.38	5.54	4.76	3.96	6.79	5.29	3.38

CAL YR 1988 MEAN 5.59 MAX 11.86 MIN 2.27

02342500 UCHEE CREEK NEAR FORT MITCHELL, AL

LOCATION.--Lat 32°19'00", long 85°00'54", in NE¼SW¼ sec. 3, T. 15 N., R. 30 E., Russell County, Hydrologic Unit 03130003, 50 ft right of channel, 100 ft upstream from bridge on State Highway 165, 2 mi south of Fort Mitchell, 4.8 mi downstream from Little Uchee Creek, and 5.3 mi upstream from mouth.

DRAINAGE AREA.--322 mi^2.

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only October 1946 to August 1953, published in WSP 1724.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 201.76 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 1, 1953, at site 1,000 ft upstream at same datum, and Sept. 1, 1953 to Aug. 15, 1965, at site 120 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--43 years, 436 ft^3/s, 18.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,100 ft^3/s, Apr. 9, 1964, gage height, 26.45 ft; minimum, 5.2 ft^3/s, Aug. 9, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 6	0400	6,810	9.69	July 4	0900	*9,750	*12.86
Apr. 10	0800	5,440	8.02				

Minimum discharge, 21 ft^3/s, Oct. 18-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	81	173	1970	300	459	1010	1420	77	654	248	151
2	30	102	143	1870	229	525	665	1940	66	456	409	252
3	36	97	122	741	195	1310	588	1240	54	2250	345	146
4	65	78	110	472	172	1260	856	690	48	8510	208	99
5	82	517	103	366	164	720	4520	496	55	4790	163	71
6	68	608	96	307	174	1040	5250	370	73	3320	138	56
7	49	340	94	293	196	764	2300	309	178	2540	116	46
8	39	148	90	281	188	519	1540	460	240	1840	103	44
9	32	92	89	260	158	410	3210	561	508	1330	93	40
10	28	84	93	235	128	347	5060	1170	718	2920	90	39
11	27	76	112	214	119	306	3820	1260	333	1820	88	35
12	26	66	144	209	117	283	2460	684	342	993	76	35
13	24	59	156	206	115	267	1780	476	584	1140	71	31
14	22	56	134	206	112	251	1440	369	308	881	71	31
15	22	58	148	208	111	241	2390	321	300	793	112	48
16	22	62	125	211	106	236	3030	290	1950	758	113	49
17	22	70	129	209	105	253	1850	249	4020	869	122	57
18	21	67	131	187	103	250	1330	218	2250	597	111	74
19	21	67	118	171	125	214	1050	197	1490	435	97	69
20	21	73	101	176	169	191	868	179	1940	560	82	57
21	25	186	100	191	761	338	765	173	3430	1070	66	58
22	37	217	99	188	1400	724	813	155	2470	810	56	81
23	63	143	95	167	766	2550	760	176	2590	630	49	140
24	63	106	94	157	372	3390	689	676	1970	532	51	122
25	50	91	94	147	269	1980	632	676	1060	482	53	105
26	44	81	94	143	232	1140	558	279	617	447	52	251
27	40	89	94	139	220	815	485	170	445	389	54	478
28	35	351	91	136	258	664	428	168	342	374	50	284
29	34	544	91	133	---	570	371	124	246	370	58	172
30	34	300	93	154	---	1180	334	111	659	275	55	198
31	47	---	640	259	---	1570	---	88	---	254	65	---
TOTAL	1161	4909	3996	10606	7364	24767	50852	15695	29463	43089	3465	3319
MEAN	37.5	164	129	342	263	799	1695	506	982	1390	112	111
MAX	82	608	640	1970	1400	3390	5250	1940	4020	8510	409	478
MIN	21	56	89	133	103	191	334	88	48	254	49	31
CFSM	.12	.51	.40	1.06	.82	2.48	5.26	1.57	3.05	4.32	.35	.34
IN.	.13	.57	.46	1.23	.85	2.86	5.87	1.81	3.40	4.98	.40	.38

CAL YR 1988 TOTAL 100478 MEAN 275 MAX 3850 MIN 13 CFSM .85 IN. 11.61
WTR YR 1989 TOTAL 198686 MEAN 544 MAX 8510 MIN 21 CFSM 1.69 IN. 22.95

02342933 SOUTH FORK COWIKEE CREEK NEAR BATESVILLE, AL

LOCATION.--Lat 32°01'03", long 85°17'45", in SE¼SE¼ sec. 14, T. 12 N., R. 27 E., Barbour County, Hydrologic Unit 03130003, on left bank at downstream side of bridge on county road, 0.1 mi downstream from Bear Creek, 1.2 mi northeast of Batesville, 11.2 mi northwest of Eufaula, and 13.0 mi upstream from mouth.

DRAINAGE AREA.--112 mi^2.

PERIOD OF RECORD.--October 1963 to September 1971, October 1972 to September 1974 (annual peak discharge only), October 1974 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--23 years (water years 1964-71, 1975-89), 117 ft^3/s, 14.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,100 ft^3/s, Feb. 17, 1975, gage height, 37.08 ft; minimum daily discharge, 0.34 ft^3/s, July 15, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 3,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 1	1800	*3,270	*13.33				

Minimum daily discharge, 2.8 ft^3/s, Oct. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	16	14	121	20	95	123	1290	12	38	18	6.2
2	4.9	12	11	69	13	176	88	828	11	45	18	5.8
3	31	9.7	8.7	39	11	416	76	171	9.5	160	25	8.1
4	33	9.0	7.7	25	9.4	104	74	114	9.0	432	21	7.7
5	19	25	7.1	18	9.7	194	1490	95	12	307	16	6.6
6	9.9	30	7.5	14	14	1100	331	77	31	192	13	6.0
7	6.9	24	6.8	13	17	186	185	61	41	130	11	5.4
8	5.1	18	6.4	18	14	128	120	50	45	74	9.6	4.9
9	4.4	19	6.6	29	11	91	345	42	101	47	8.6	4.4
10	4.3	18	6.6	16	9.1	75	1460	392	46	33	7.9	4.1
11	4.1	17	13	13	7.8	60	642	168	29	23	7.7	3.7
12	3.9	15	14	12	7.3	43	249	86	52	17	7.3	3.4
13	3.7	17	10	12	6.9	34	174	62	28	15	7.0	3.8
14	3.4	18	7.4	15	6.6	29	139	49	16	15	8.6	3.6
15	3.3	31	6.6	33	6.6	24	316	48	111	31	362	5.5
16	3.9	26	11	39	6.8	70	216	39	595	56	177	6.9
17	4.0	33	14	24	6.6	77	150	31	404	65	78	6.2
18	4.3	28	13	16	6.9	32	102	25	121	33	43	5.2
19	4.0	28	9.7	12	11	20	83	22	896	36	26	4.3
20	3.7	36	7.9	15	12	16	84	29	1330	111	20	3.7
21	8.2	45	7.4	14	228	211	79	31	640	282	15	3.5
22	7.7	36	6.7	12	144	284	63	28	329	125	12	4.0
23	5.4	24	6.1	11	67	2010	52	27	165	222	9.3	4.7
24	4.3	19	6.1	9.7	38	513	39	60	111	99	8.1	4.5
25	3.2	16	6.1	8.3	23	246	32	52	87	92	7.3	19
26	2.8	15	6.5	7.7	15	193	28	34	67	61	6.9	48
27	2.9	15	6.4	7.4	11	153	22	24	57	58	6.6	21
28	3.1	22	6.5	7.4	85	131	17	19	46	140	6.5	12
29	3.8	23	7.0	7.1	---	106	15	17	44	43	6.1	10
30	4.6	17	6.8	10	---	405	17	14	44	24	5.8	22
31	8.2	---	57	20	---	214	---	13	---	20	5.9	---
TOTAL	215.2	661.7	311.6	667.6	817.7	7436	6811	3998	5489.5	3026	974.2	254.2
MEAN	6.94	22.1	10.1	21.5	29.2	240	227	129	183	97.6	31.4	8.47
MAX	33	45	57	121	228	2010	1490	1290	1330	432	362	48
MIN	2.8	9.0	6.1	7.1	6.6	16	15	13	9.0	15	5.8	3.4
CFSM	.06	.20	.09	.19	.26	2.14	2.03	1.15	1.63	.87	.28	.08
IN.	.07	.22	.10	.22	.27	2.47	2.26	1.33	1.82	1.01	.32	.08

CAL YR 1988 TOTAL 16318.6 MEAN 44.6 MAX 1570 MIN 1.1 CFSM .40 IN. 5.42
WTR YR 1989 TOTAL 30662.7 MEAN 84.0 MAX 2010 MIN 2.8 CFSM .75 IN. 10.18

02343300 ABBIE CREEK NEAR HALEBURG, AL

LOCATION.--Lat 31°28'24", long 85°09'45", in NE¼SE¼ sec. 19, T. 6 N., R. 29 E., Henry County, Hydrologic Unit 03130004, on right bank on downstream side of bridge on State Highway 95, 1.2 mi upstream from Peterman Creek, 4.5 mi northwest of Haleburg, 7.8 mi upstream from mouth, and 9 mi southeast of Abbeville.

DRAINAGE AREA.--146 mi².

PERIOD OF RECORD.--June 1958 to September 1971, October 1974 to current year.

REVISED RECORDS.--WSP 2106: 1969(M). WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 145.74 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--28 years (water years 1959-71, 1975-89), 199 ft³/s, 18.51 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,590 ft³/s, Mar. 31, 1970, gage height, 23.84 ft; minimum discharge, 8.8 ft³/s, July 18, 19, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,250 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	1500	*1,050	*6.69				

Minimum discharge, 36 ft³/s, Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	56	60	116	77	134	195	376	58	136	90	92
2	56	54	58	85	75	150	141	403	54	142	98	193
3	218	51	58	72	73	287	124	220	51	193	80	206
4	161	51	58	66	74	197	114	140	49	158	91	134
5	89	92	58	64	73	158	269	111	52	180	72	89
6	69	80	58	64	76	154	240	111	108	201	64	70
7	63	65	58	65	77	137	178	90	90	192	58	64
8	58	60	58	66	72	119	137	78	222	132	58	60
9	55	59	59	110	65	109	133	73	866	105	75	58
10	55	57	59	183	63	101	391	100	354	90	65	53
11	55	56	78	124	63	97	580	106	187	79	61	51
12	53	54	91	98	62	94	430	83	199	71	57	47
13	49	56	70	90	61	90	274	74	148	95	55	45
14	47	58	65	88	61	87	198	70	140	296	55	42
15	47	58	64	88	61	84	202	70	162	286	297	51
16	48	58	66	82	60	88	194	65	537	280	280	63
17	48	60	68	74	61	106	156	59	584	410	168	56
18	47	58	64	70	60	89	131	56	446	218	109	48
19	47	58	62	69	81	83	116	54	290	163	88	42
20	47	63	62	76	77	78	108	94	291	248	75	39
21	63	67	62	86	414	148	114	276	201	418	67	39
22	65	62	62	76	604	188	107	118	162	362	64	39
23	54	64	62	72	321	359	98	312	139	309	62	37
24	50	63	63	68	172	313	87	542	125	231	56	37
25	48	62	68	66	135	237	81	193	115	246	52	67
26	48	61	64	65	120	179	75	129	171	165	51	104
27	48	62	61	65	112	147	69	100	137	135	51	83
28	48	71	63	63	129	129	64	84	109	111	50	72
29	50	63	67	63	---	117	76	71	101	96	100	69
30	51	61	65	65	---	286	102	65	111	85	60	184
31	53	---	72	77	---	263	---	62	---	79	70	---
TOTAL	1948	1840	1983	2516	3379	4808	5184	4385	6259	5912	2679	2234
MEAN	62.8	61.3	64.0	81.2	121	155	173	141	209	191	86.4	74.5
MAX	218	92	91	183	604	359	580	542	866	418	297	206
MIN	47	51	58	63	60	78	64	54	49	71	50	37
CFSM	.43	.42	.44	.56	.83	1.06	1.18	.97	1.43	1.31	.59	.51
IN.	.50	.47	.51	.64	.86	1.23	1.32	1.12	1.59	1.51	.68	.57

CAL YR 1988 TOTAL 44004 MEAN 120 MAX 1080 MIN 28 CFSM .82 IN. 11.21
WTR YR 1989 TOTAL 43127 MEAN 118 MAX 866 MIN 37 CFSM .81 IN. 10.99

02343801 CHATTAHOOCHEE RIVER NEAR COLUMBIA, AL
(National stream-quality accounting network station)

LOCATION.--Lat 31°15'33", long 85°06'37", Early County, Ga.-Houston County, Ala., Hydrologic Unit 03130004, at left end of George W. Andrews Lock and Dam, 1.3 mi downstream from Omusee Creek, 2.3 mi south of Columbia, Ala., and at mile 46.5.

DRAINAGE AREA.--8,210 mi², approximately.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Gate-opening and water-stage recorders. Datum of headwater gage and tailwater gages is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Sidney Lanier, West Point Lake, Lake Harding, Walter F. George Lake, and George W. Andrews Reservoir. No adjustments made for George W. Andrews Reservoir's annual change in contents, which is insignificant.

AVERAGE DISCHARGE.--14 years, 10,400 ft³/s, 17.20 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131,000 ft³/s, Jan. 27, 1978, maximum headwater gage height, 118.12 ft, Jan. 27, 1978, maximum tailwater gage height, 116.66 ft, Jan. 27, 1978; no flow due to non-typical operation pattern, except for an undetermined amount of leakage Nov. 22, 1987.

EXTREMES FOR PERIOD OF RECORD.--Flood of March 1929, thought to be the highest since 1827, based on station on Chattahoochee River at Columbia, Ala., 2.4 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40,900 ft³/s, Apr. 10, maximum headwater gage height, 103.21 ft, Oct. 26, maximum tailwater gage height, 95.09 ft, Apr. 11; minimum daily discharge, 498 ft³/s, Jan. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1290	8690	8470	1440	7220	5420	2820	8620	9200	4340	9700	9590
2	954	8730	8660	6930	7440	5260	1150	11400	8430	1170	8460	1610
3	7390	8830	2170	7440	6830	6360	9570	10300	6130	11900	7890	1600
4	6950	7590	996	7730	1660	1560	10400	6910	2950	24800	8010	9930
5	6480	1780	6620	7420	779	1070	13500	6660	5950	33300	1400	8240
6	6610	984	8270	7180	5440	7840	31400	1230	4010	30100	920	7870
7	6150	7130	8320	1540	6430	9620	36000	823	5870	29800	9440	8280
8	771	8820	8540	717	6250	8490	21500	8530	4600	19600	9530	7910
9	1050	8220	8340	7690	6330	8950	23200	9760	6140	15600	9700	1650
10	7180	8420	1980	10800	6790	8640	34600	9580	3120	12300	9700	883
11	8350	9210	726	10300	1290	1670	38800	9370	1480	11900	9700	8170
12	8300	1620	4640	10300	778	937	29700	7160	3730	11700	1350	10200
13	9100	751	6080	10100	2700	7880	28100	1130	3270	12300	1170	11300
14	7550	7170	6540	2300	3450	8150	21200	757	3130	13700	10000	11600
15	1090	8810	6420	802	7260	8450	19800	7760	3370	6180	13900	12000
16	880	8590	6370	3010	9090	9720	8600	8830	7100	6660	13400	2040
17	6390	6770	1620	5370	8380	10100	12800	8590	14000	14000	13900	1270
18	8300	5840	802	3970	2000	1780	13900	8850	8030	16500	17000	10400
19	8980	1660	5410	4100	772	847	12600	8370	13600	16400	1600	12400
20	8390	871	6600	7090	4350	7340	12400	6030	19600	15500	1010	12200
21	8300	7000	7800	2130	7550	8460	12600	1570	34000	30400	10500	12400
22	1590	8890	8860	871	8160	8350	1530	9190	37100	21800	11100	12400
23	1030	8830	8100	7110	6440	13300	1100	10500	36600	12900	11200	1940
24	8720	8850	1850	8900	5730	17000	8610	9380	32400	16300	11400	889
25	8940	8700	702	8690	1640	27500	9640	7750	22100	19800	11100	10300
26	9210	1430	5800	8560	823	18100	9790	7490	14300	17600	1330	13600
27	9480	979	6620	8900	5010	10900	9620	4380	10800	17700	817	12300
28	8860	6840	7060	1040	5370	9950	7740	3750	10700	12500	11300	12300
29	1290	8700	9860	498	---	9960	5980	6270	11600	7520	12300	12300
30	783	8590	6270	7850	---	10200	6930	7970	10800	1590	12100	2010
31	6910	---	2020	7390	---	13400	---	8380	---	8720	12400	---
TOTAL	177268	189295	172516	178168	135962	267204	455580	217290	354110	474580	263327	239582
MEAN	5718	6310	5565	5747	4856	8619	15190	7009	11800	15310	8494	7986
MAX	9480	9210	9860	10800	9090	27500	38800	11400	37100	33300	17000	13600
MIN	771	751	702	498	772	847	1100	757	1480	1170	817	883
CFSM	.70	.77	.68	.70	.59	1.05	1.85	.85	1.44	1.87	1.04	.97
IN.	.80	.86	.78	.81	.62	1.21	2.06	.98	1.60	2.15	1.19	1.09

CAL YR 1988 TOTAL 2218301 MEAN 6061 MAX 29000 MIN 689 CFSM .74 IN 10.05
WTR YR 1989 TOTAL 3124882 MEAN 8561 MAX 38800 MIN 498 CFSM 1.04 IN 14.16

02361000 CHOCTAWHATCHEE RIVER NEAR NEWTON, AL

LOCATION.--Lat 31°20'30", long 85°36'43", in SW¼SE¼ sec. 2, T. 4 N., R. 24 E., Dale County, Hydrologic Unit 03140201, on left bank at downstream side of bridge on State Highway 123, 200 ft downstream from abandoned mill dam, 1,500 ft upstream from Hurricane Creek, 0.8 mi north of Newton, 1 mi downstream from Atlantic Coast Line Railroad bridge, and at mile 133.0.

DRAINAGE AREA.--686 mi^2.

PERIOD OF RECORD.--June 1906 to August 1908, October 1911 to August 1912 (gage heights only), November 1921 to September 1927, May 1935 to current year. Monthly discharge only for period January to April 1925, published in WSP 1304. Gage-height records collected near same site from 1931 to December 1971 are contained in reports of the National Weather Service.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 138.56 ft above National Geodetic Vertical Datum of 1929. See WSP 1304 or 1724 for history of changes prior to Sept. 9, 1938.

REMARKS.--No estimated daily discharges. Records good. Prior to January 1941 moderate diurnal fluctuation at low flow caused by gristmills above station.

AVERAGE DISCHARGE.--59 years (water years 1923-27, 1936-89), 948 ft^3/s, 18.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,800 ft^3/s, Jan. 20, 1936; maximum gage height, 31.26 ft, Jan. 27, 1978; minimum daily discharge, 44 ft^3/s, July 20, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1900, 42 ft present site and datum, Mar. 15, 1929, from information by State Highway Department (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 16	2200	*3,410	*11.00				

Minimum daily discharge, 121 ft^3/s, Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	189	252	474	336	546	973	1060	173	933	572	384
2	173	183	234	456	333	603	807	1860	166	1920	512	305
3	392	176	223	420	315	1000	647	1620	174	2230	467	365
4	564	177	221	365	303	887	563	1280	152	1590	598	342
5	490	265	218	316	301	797	1170	921	147	1340	543	282
6	377	359	211	288	300	731	1410	684	177	1440	476	249
7	294	326	211	279	309	658	1150	567	234	1270	409	226
8	242	288	215	280	306	672	964	497	530	973	387	200
9	210	257	217	387	275	616	792	455	2450	759	393	181
10	194	228	220	543	258	519	1280	524	1450	626	353	169
11	186	218	270	489	249	477	2490	510	1000	561	323	158
12	177	211	346	412	240	451	2270	501	992	495	300	148
13	166	237	320	374	238	433	1880	502	668	505	283	141
14	156	246	299	352	237	411	1380	434	586	809	273	134
15	152	245	278	352	244	394	1090	383	668	968	337	132
16	149	247	276	354	238	384	953	345	2150	1660	462	154
17	147	249	285	345	235	403	854	311	2930	1830	524	170
18	145	251	272	329	231	394	773	280	2690	1730	423	159
19	145	240	261	313	256	423	674	257	2310	1280	337	145
20	143	296	254	315	289	375	596	274	1660	1180	284	136
21	194	315	250	348	1890	397	556	635	1140	1310	248	131
22	217	289	249	335	1890	743	572	532	1080	1960	228	126
23	195	292	249	318	1400	1790	586	430	1360	2190	210	121
24	183	282	254	300	915	1940	558	794	1330	2170	191	122
25	171	262	262	282	697	1550	480	643	869	1660	176	152
26	160	249	272	269	569	1290	423	546	733	1410	166	256
27	152	247	261	266	517	1000	382	434	831	1120	162	325
28	150	257	267	261	523	783	343	319	749	867	198	351
29	150	252	286	257	---	655	340	256	665	713	184	303
30	151	261	282	268	---	986	517	215	643	636	182	283
31	161	---	312	311	---	1160	---	191	---	582	260	---
TOTAL	6554	7594	8027	10658	13894	23468	27473	18260	30707	38717	10461	6350
MEAN	211	253	259	344	496	757	916	589	1024	1249	337	212
MAX	564	359	346	543	1890	1940	2490	1860	2930	2230	598	384
MIN	143	176	211	257	231	375	340	191	147	495	162	121
CFSM	.31	.37	.38	.50	.72	1.10	1.33	.86	1.49	1.82	.49	.31
IN.	.36	.41	.44	.58	.75	1.27	1.49	.99	1.67	2.10	.57	.34

CAL YR 1988 TOTAL 202463 MEAN 553 MAX 6390 MIN 60 CFSM .81 IN. 10.98
WTR YR 1989 TOTAL 202163 MEAN 554 MAX 2930 MIN 121 CFSM .81 IN. 10.96

02361000 CHOCTAWHATCHEE RIVER NEAR NEWTON, AL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.48	2.41	2.67	3.43	2.97	3.67	5.03	5.18	2.33	4.91	3.76	3.13
2	2.50	2.38	2.60	3.37	2.96	3.86	4.52	7.45	2.30	7.55	3.56	2.86
3	3.21	2.35	2.56	3.25	2.90	5.12	4.00	6.77	2.33	8.37	3.41	3.07
4	3.73	2.35	2.55	3.07	2.86	4.78	3.73	5.75	2.23	6.74	3.84	2.99
5	3.48	2.71	2.53	2.90	2.85	4.48	5.56	4.58	2.20	6.07	3.66	2.78
6	3.11	3.05	2.50	2.80	2.85	4.27	6.28	3.82	2.35	6.34	3.44	2.66
7	2.82	2.94	2.50	2.77	2.88	4.04	5.53	3.46	2.60	5.87	3.21	2.57
8	2.63	2.81	2.52	2.78	2.87	4.09	5.01	3.25	3.56	5.03	3.14	2.45
9	2.50	2.69	2.53	3.14	2.76	3.90	4.47	3.13	8.86	4.36	3.16	2.37
10	2.43	2.57	2.54	3.66	2.69	3.58	5.87	3.38	6.37	3.94	3.03	2.31
11	2.39	2.53	2.73	3.48	2.66	3.44	8.98	3.35	5.12	3.72	2.93	2.26
12	2.35	2.51	3.00	3.22	2.62	3.36	8.45	3.34	5.08	3.50	2.85	2.21
13	2.30	2.61	2.92	3.10	2.61	3.29	7.50	3.36	4.07	3.53	2.79	2.17
14	2.25	2.65	2.85	3.02	2.61	3.22	6.19	3.16	3.80	4.52	2.75	2.13
15	2.23	2.64	2.77	3.02	2.64	3.16	5.36	3.01	4.05	5.00	2.97	2.12
16	2.21	2.65	2.76	3.03	2.61	3.13	4.98	2.90	8.07	6.93	3.39	2.24
17	2.20	2.66	2.79	3.00	2.60	3.19	4.67	2.81	9.96	7.38	3.60	2.32
18	2.19	2.67	2.75	2.95	2.59	3.17	4.40	2.72	9.43	7.12	3.26	2.26
19	2.19	2.62	2.70	2.89	2.69	3.26	4.09	2.65	8.54	5.90	2.97	2.19
20	2.18	2.83	2.68	2.90	2.81	3.10	3.84	2.72	6.92	5.63	2.79	2.14
21	2.42	2.90	2.66	3.01	7.42	3.18	3.70	3.96	5.51	5.98	2.66	2.11
22	2.53	2.81	2.66	2.97	7.52	4.31	3.76	3.62	5.33	7.70	2.57	2.09
23	2.43	2.82	2.66	2.91	6.24	7.24	3.80	3.29	6.14	8.27	2.50	2.06
24	2.38	2.78	2.68	2.85	4.85	7.66	3.71	4.48	6.04	8.22	2.42	2.06
25	2.32	2.71	2.71	2.78	4.17	6.66	3.45	3.99	4.71	6.94	2.35	2.22
26	2.27	2.66	2.75	2.74	3.75	5.95	3.26	3.67	4.28	6.28	2.30	2.68
27	2.23	2.65	2.71	2.73	3.57	5.12	3.12	3.30	4.59	5.44	2.28	2.93
28	2.21	2.69	2.73	2.70	3.59	4.44	2.99	2.91	4.33	4.71	2.45	3.02
29	2.22	2.67	2.80	2.69	---	4.03	2.98	2.69	4.06	4.22	2.38	2.86
30	2.22	2.71	2.78	2.73	---	5.04	3.57	2.52	3.99	3.97	2.37	2.78
31	2.27	---	2.89	2.89	---	5.57	---	2.42	---	3.79	2.65	---
MEAN	2.48	2.67	2.69	2.99	3.43	4.30	4.76	3.67	4.97	5.74	2.95	2.47
MAX	3.73	3.05	3.00	3.66	7.52	7.66	8.98	7.45	9.96	8.37	3.84	3.13
MIN	2.18	2.35	2.50	2.69	2.59	3.10	2.98	2.42	2.20	3.50	2.28	2.06

CAL YR 1988 MEAN 3.52 MAX 16.62 MIN 1.63
WTR YR 1989 MEAN 3.59 MAX 9.96 MIN 2.06

CHOCTAWHATCHEE RIVER MAIN STEM

02362000 (NWS 01-3255-07) CHOCTAWHATCHEE RIVER NEAR GENEVA, AL

LOCATION.--Lat 31°02', long 85°52', in NE¼SW¼ sec. 21, T. 1 N., R. 22 E., Geneva County, Hydrologic Unit 03140201, on downstream side of State Highway 52 bridge, 1 mi northeast of Geneva, and 1.4 mi upstream from Pea River.

DRAINAGE AREA.--1,346 mi².

PERIOD OF RECORD.--November 1928 to current year (gage heights only). October 1971 to current year in reports of Geological Survey. November 1928 to December 1971 collected by National Weather Service. See WSP 1304 for discharge records for June 1922 to November 1926 and gage heights and discharge measurements only from August to December 1904. January 1929 to December 1971, published in "Daily River Stages" reports of National Weather Service.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 62.80 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 11, 1967, nonrecording gage located on highway bridge 30 ft upstream from present site at same datum.

COOPERATION.--Records provided by National Weather Service.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 46.9 ft, Mar. 16, 1929; minimum gage height, 0.9 ft, Sept. 24, 1941.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 18.03 ft, June 19; minimum gage height, 2.75 ft, Sept. 23.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.65	3.16	3.40	5.68	3.85	---	9.95	4.93	2.95	---	5.57	3.36
2	3.68	3.75	4.30	6.15	3.70	---	---	9.27	2.85	7.21	5.25	5.08
3	5.18	3.35	3.25	5.72	3.65	7.30	7.27	11.30	2.75	---	4.95	5.46
4	8.35	3.20	3.21	---	3.55	8.85	6.10	11.80	3.52	10.70	4.65	4.69
5	8.65	3.50	3.20	4.10	3.51	---	6.20	10.05	3.48	12.44	4.60	4.22
6	6.95	---	3.19	---	---	7.00	10.20	---	3.17	12.55	4.64	3.85
7	5.10	4.39	3.17	---	---	6.99	11.90	6.15	3.54	13.05	4.35	3.75
8	4.25	3.86	3.20	---	---	7.15	---	5.05	4.35	12.95	4.10	3.70
9	---	3.63	3.15	3.75	3.60	6.80	9.21	4.26	14.45	11.33	4.22	3.35
10	3.65	3.50	---	4.71	---	6.30	7.65	4.05	17.55	9.24	4.30	3.20
11	3.54	3.40	3.23	5.25	---	---	8.70	4.45	17.92	7.19	4.05	3.14
12	---	3.35	4.00	---	---	---	10.44	4.30	14.78	5.90	3.95	3.06
13	3.35	3.26	4.21	4.80	---	4.63	11.65	4.00	8.96	5.15	3.81	2.93
14	3.20	3.45	3.80	---	3.15	4.41	11.30	3.97	7.03	4.85	3.12	2.95
15	3.15	3.56	3.60	---	---	4.29	9.95	3.83	5.76	6.35	3.71	2.90
16	---	---	3.60	4.04	---	---	---	3.71	9.32	---	3.96	2.95
17	3.10	3.40	3.55	3.96	3.15	---	7.82	3.60	14.30	---	4.15	3.09
18	3.05	3.35	3.55	3.82	3.15	---	6.70	3.45	17.12	9.87	4.30	3.16
19	3.05	3.35	3.42	3.75	---	4.16	6.05	---	18.03	10.26	4.10	3.00
20	3.05	---	3.37	3.70	---	4.17	5.55	3.30	16.67	9.55	3.86	2.90
21	3.10	5.12	3.30	3.80	7.90	4.01	5.40	3.41	14.83	9.10	3.80	2.80
22	---	5.19	3.35	---	13.80	5.15	5.15	4.70	12.95	9.30	3.64	2.80
23	4.36	4.29	3.30	3.68	14.25	9.05	4.85	4.55	12.10	11.03	3.55	2.75
24	3.55	3.90	3.30	3.59	12.55	11.55	4.71	---	---	12.13	3.60	---
25	3.28	---	3.31	3.50	---	13.20	4.54	5.10	12.19	12.72	3.40	3.78
26	3.15	---	3.30	3.45	---	13.28	4.30	4.65	11.56	13.16	3.30	3.46
27	3.10	---	3.31	3.35	---	---	4.10	4.15	10.02	12.35	3.59	4.01
28	3.05	---	3.30	3.35	5.07	9.38	---	3.85	8.22	10.15	3.72	3.85
29	3.05	3.55	3.25	3.32	---	8.07	3.80	3.44	7.20	8.00	3.66	3.85
30	3.02	3.45	3.30	3.31	---	7.05	---	3.19	7.45	---	3.70	---
31	3.05	---	3.40	3.56	---	8.90	---	3.05	---	6.35	3.45	---
MEAN	---	---	---	---	---	---	---	---	---	---	4.03	---
MAX	---	---	---	---	---	---	---	---	---	---	5.57	---
MIN	---	---	---	---	---	---	---	---	---	---	3.12	---

02362240 LITTLE DOUBLE BRIDGES CREEK NEAR ENTERPRISE, AL

LOCATION.--Lat 31°16'20", long 85°57'30", in SW¼ sec. 33, T. 4 N., R. 21 E., Coffee County, Hydrologic Unit 03140201, near right bank on downstream side of bridge on county road 18, 8.4 mi southwest of Enterprise.

DRAINAGE AREA.--21.4 mi^2.

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 195 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 827 ft^3/s, Mar. 13, 1986, gage height, 8.21 ft; minimum daily discharge, 2.6 ft^3/s, June 19, 20, 22, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 15	2300	*265	*6.50				

Minimum daily discharge, 4.4 ft^3/s, May 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	49	18	61	19	29	25	103	4.5	18	18	11
2	40	24	17	26	19	42	21	81	4.5	17	17	27
3	76	19	17	22	18	99	20	21	11	28	16	18
4	39	18	17	20	20	35	21	15	7.5	40	20	16
5	20	54	17	19	18	30	182	14	6.5	31	14	13
6	16	29	17	20	19	36	51	12	20	49	13	11
7	16	19	17	22	19	26	28	11	66	41	12	10
8	14	18	17	22	17	23	24	9.5	65	20	18	10
9	13	18	18	42	16	22	22	9.3	128	17	24	9.7
10	13	18	18	35	16	21	35	13	28	14	16	9.3
11	14	18	34	26	16	21	48	13	16	12	14	8.7
12	12	17	35	24	16	20	25	9.9	17	11	13	8.3
13	11	20	22	23	16	19	21	8.9	16	14	12	7.9
14	11	20	20	23	17	19	19	8.9	16	39	12	7.6
15	11	19	19	28	17	19	64	9.9	138	30	15	8.0
16	11	19	22	25	17	19	31	9.2	196	27	15	33
17	11	27	22	21	16	19	21	8.0	88	25	13	19
18	11	21	18	20	16	18	18	7.3	33	18	12	12
19	11	18	18	19	18	18	16	8.2	48	19	11	10
20	11	48	18	24	18	17	16	13	37	66	10	9.5
21	23	39	18	25	139	31	15	28	46	44	10	9.3
22	35	22	18	20	74	65	14	17	94	81	11	9.3
23	17	22	18	19	30	142	13	12	63	107	12	8.9
24	15	20	18	18	24	58	12	14	25	96	10	8.9
25	13	19	19	18	23	34	11	11	19	86	9.3	23
26	13	19	17	18	23	29	12	8.9	36	33	8.8	38
27	13	21	17	18	23	26	11	7.4	20	26	8.4	20
28	13	23	21	18	30	23	9.6	6.4	17	22	8.1	17
29	14	19	23	17	---	22	10	5.6	20	19	8.3	16
30	14	18	19	20	---	111	11	5.0	22	17	8.3	39
31	18	---	31	25	---	41	---	4.4	---	16	8.1	---
TOTAL	564	715	620	738	714	1134	826.6	504.8	1308.0	1083	397.3	448.4
MEAN	18.2	23.8	20.0	23.8	25.5	36.6	27.6	16.3	43.6	34.9	12.8	14.9
MAX	76	54	35	61	139	142	182	103	196	107	24	39
MIN	11	17	17	17	16	17	9.6	4.4	4.5	11	8.1	7.6
CFSM	.85	1.11	.93	1.11	1.19	1.71	1.29	.76	2.04	1.63	.60	.70
IN.	.98	1.24	1.08	1.28	1.24	1.97	1.44	.88	2.27	1.88	.69	.78

CAL YR 1988 TOTAL 9205.8 MEAN 25.2 MAX 312 MIN 2.6 CFSM 1.18 IN. 16.00
WTR YR 1989 TOTAL 9053.1 MEAN 24.8 MAX 196 MIN 4.4 CFSM 1.16 IN. 15.74

02363000 PEA RIVER NEAR ARITON, AL

LOCATION.--Lat 31°35'41", long 85°46'59", in SW¼ sec. 7, T. 7 N., R. 23 E., Dale County, on left bank at downstream side of abandoned bridge, and about 20 ft upstream from bridge on U.S. Highway 231, 2.2 mi downstream from Bryors Mill Creek, 2.8 mi downstream from Atlantic Coast Line Railroad bridge, 3.5 mi west of Ariton, and at mile 89.6.

DRAINAGE AREA.--498 mi^2.

PERIOD OF RECORD.--October 1938 to September 1970, October 1970 to September 1982 (flood hydrograph), October 1982 to September 1987 (annual peak discharge), October 1987 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.72 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 22, 1938, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: June 18 to Aug. 11, Aug. 27 to Sept. 22. Records fair except those for periods of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--34 years (water years 1939-70, 1988-89), 600 ft^3/s, 16.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,600 ft^3/s, Feb. 18, 1975, gage height, 24.38 ft; minimum discharge, 6.5 ft^3/s, Sept. 14, 1968, gage height, 1.60 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1900, about 25 ft, present site and datum, March 1929, from information by local residents (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 26	1600	*2,780	*8.80				

Minimum daily discharge, 31 ft^3/s, Oct. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	40	129	207	195	360	1140	983	91	e700	e320	e90
2	82	39	115	302	224	477	1050	2150	80	e900	e290	e70
3	367	41	105	352	214	712	981	2300	73	e700	e260	e80
4	592	46	99	369	199	829	840	2070	73	e800	e230	e70
5	472	66	95	377	188	874	1250	1770	79	e1200	e200	e60
6	284	138	91	271	178	1380	1390	1160	239	e1100	e180	e55
7	165	159	90	198	198	1670	1390	637	161	e1000	e160	e50
8	111	137	88	174	218	1700	1950	399	225	e600	e170	e46
9	83	105	86	179	203	1240	1980	301	624	e350	e190	e43
10	68	100	86	188	194	901	2170	306	596	e280	e160	e40
11	59	113	93	184	174	668	2190	349	614	e240	e130	e38
12	54	105	112	174	162	498	2290	426	634	e220	119	e36
13	48	93	126	166	152	399	2650	467	526	e250	111	e34
14	43	91	128	160	146	335	2040	517	296	e300	106	e32
15	40	94	121	172	146	294	1370	370	386	e400	123	e50
16	38	95	122	228	146	285	1080	260	1030	e900	211	e100
17	36	117	133	294	143	465	981	216	1360	e1300	198	e170
18	34	170	150	267	138	434	926	184	e1800	e1100	178	e160
19	33	192	151	224	141	318	932	160	e1700	e800	181	e140
20	32	203	138	199	159	282	799	193	e2000	e550	149	e100
21	34	239	129	207	438	488	619	254	e2400	e900	124	e70
22	38	234	121	210	793	875	538	233	e2600	e1400	106	e49
23	41	195	115	198	904	1550	520	209	e2300	e1600	94	45
24	39	161	111	177	878	1790	488	270	e2000	e1200	85	44
25	38	145	112	160	809	2100	397	380	e1500	e1000	76	67
26	36	132	114	150	735	2680	323	549	e1000	e750	70	229
27	34	124	109	144	464	2200	276	376	e700	e550	e63	369
28	32	137	110	149	345	1300	242	232	e450	e400	e58	285
29	31	146	118	152	---	854	211	167	e375	e300	e54	192
30	32	138	128	153	---	1140	264	129	e450	e340	e52	154
31	34	---	144	178	---	1220	---	106	---	e360	e60	---
TOTAL	3063	3795	3569	6563	8884	30318	33277	18123	26362	22490	4508	2968
MEAN	98.8	126	115	212	317	978	1109	585	879	725	145	98.9
MAX	592	239	151	377	904	2680	2650	2300	2600	1600	320	369
MIN	31	39	86	144	138	282	211	106	73	220	52	32
CFSM	.20	.25	.23	.43	.64	1.96	2.23	1.17	1.76	1.46	.29	.20
IN.	.23	.28	.27	.49	.66	2.26	2.49	1.35	1.97	1.68	.34	.22

CAL YR 1988 TOTAL 111039 MEAN 303 MAX 2970 MIN 13 CFSM .61 IN. 8.29
WTR YR 1989 TOTAL 163920 MEAN 449 MAX 2680 MIN 31 CFSM .90 IN. 12.24

e Estimated

02364000 (NWS 01-2577-07) PEA RIVER AT ELBA, AL

LOCATION.--Lat 31°24'55", long 86°03'45", in SW¼SE¼ sec. 8, T. 5 N., R. 20 E., Coffee County, Hydrologic Unit 03140202, on downstream side of bridge on U.S. Highway 84 in Elba, 0.2 mi downstream from Whitewater Creek, and 4.5 mi upstream from Elba Dam.

DRAINAGE AREA.--959 mi².

PERIOD OF RECORD.--February 1930 to current year (gage heights only). October 1971 to current year in reports of Geological Survey. February 1930 to December 1971 collected by National Weather Service. See WSP 1304 for record of discharge from May 1935 to September 1947 and gage heights for June to December 1906. February 1930 to December 1971, published in "Daily River Stages" reports of National Weather Service.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 159.24 ft above National Geodetic Vertical Datum of 1929. Prior to June 19, 1934, at datum 0.1 ft lower.

REMARKS.--Stage affected by operation of hydroelectric plant at Elba Dam.

COOPERATION.--Records provided by National Weather Service.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 37.0 ft, Feb. 20, 1975; minimum gage height, 0.5 ft, May 14, 15, 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929 reached a stage of 43.5 ft from reports of National Weather Service.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 18.30 ft, June 17; minimum gage height, 6.25 ft, Sept. 14, 15.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.80	7.05	7.40	7.90	7.65	8.05	10.80	7.80	6.90	10.50	8.60	6.55
2	8.40	6.95	7.35	7.95	7.60	8.05	9.90	14.10	6.80	10.65	8.40	6.90
3	8.90	6.95	7.30	8.00	7.55	9.50	9.45	12.85	6.85	12.35	8.25	6.80
4	9.50	6.90	7.25	7.90	7.55	9.25	9.25	11.80	7.05	13.10	8.05	7.00
5	9.05	7.55	7.20	7.80	7.50	9.15	13.05	10.45	7.00	15.40	8.00	6.90
6	8.25	7.65	7.20	7.80	7.50	11.80	12.60	10.00	7.10	14.70	7.90	6.75
7	7.85	7.80	7.15	7.65	7.55	11.10	11.75	8.90	8.20	14.55	7.70	6.65
8	7.50	7.60	7.15	7.55	7.50	10.85	10.70	8.15	8.90	12.30	7.55	6.60
9	7.25	7.40	7.15	7.65	7.50	10.25	11.35	7.85	10.45	10.80	7.60	6.55
10	7.20	7.30	7.15	7.65	7.45	9.45	12.80	7.90	9.10	9.85	7.45	6.55
11	7.15	7.25	7.30	7.60	7.40	8.85	15.15	7.85	8.50	8.95	7.35	6.50
12	7.05	7.25	7.55	7.55	7.35	8.35	13.40	7.80	8.95	8.50	7.25	6.45
13	7.00	7.30	7.60	7.50	7.30	8.05	12.45	7.85	8.45	8.30	7.25	6.35
14	6.95	7.40	7.40	7.50	7.30	7.95	12.20	7.85	8.00	8.30	7.20	6.25
15	6.90	7.35	7.35	7.60	7.30	7.90	11.95	7.90	7.65	9.00	7.30	6.25
16	6.85	7.30	7.40	7.85	7.30	7.85	12.10	7.65	16.15	11.65	7.50	6.35
17	6.85	7.50	7.45	7.85	7.30	7.80	9.80	7.50	18.30	14.00	7.70	6.70
18	6.85	7.65	7.40	7.80	7.25	8.10	9.35	7.35	14.30	11.50	7.50	6.65
19	6.85	7.80	7.40	7.70	7.35	7.95	9.10	7.15	13.55	10.90	7.35	6.60
20	6.85	7.80	7.40	7.70	7.35	7.80	8.70	7.20	13.80	9.50	7.30	6.55
21	6.90	8.15	7.35	7.75	8.25	7.80	8.35	7.80	14.80	12.85	7.15	6.50
22	7.60	7.90	7.35	7.70	9.95	10.30	8.10	7.95	15.00	12.45	7.05	6.40
23	7.20	7.80	7.30	7.65	9.95	14.00	8.00	7.65	15.00	14.15	7.05	6.30
24	7.10	7.65	7.30	7.55	9.55	14.05	7.85	7.95	15.20	15.10	6.95	7.10
25	7.00	7.50	7.35	7.45	8.90	12.65	7.80	7.80	12.10	14.85	6.85	7.05
26	6.85	7.40	7.35	7.40	8.70	12.15	7.75	7.75	10.20	11.75	6.80	7.80
27	6.85	7.35	7.30	7.40	8.45	12.10	7.70	7.85	10.40	10.75	6.70	8.00
28	6.85	7.65	7.30	7.35	8.05	11.10	7.65	7.55	8.95	13.15	6.65	7.90
29	6.85	7.60	7.40	7.35	---	9.65	7.50	7.25	8.50	10.35	6.60	7.50
30	6.85	7.55	7.40	7.35	---	11.60	7.45	7.05	9.05	9.75	6.55	7.25
31	7.05	---	7.45	7.50	---	11.55	---	6.95	---	9.05	6.55	---
MEAN	7.33	7.48	7.34	7.64	7.87	9.84	10.13	8.37	10.50	11.58	7.36	6.79
MAX	9.50	8.15	7.60	8.00	9.95	14.05	15.15	14.10	18.30	15.40	8.60	8.00
MIN	6.80	6.90	7.15	7.35	7.25	7.80	7.45	6.95	6.80	8.30	6.55	6.25

CAL YR 1988 MEAN 7.77 MAX 18.85 MIN 6.20
WTR YR 1989 MEAN 8.52 MAX 18.30 MIN 6.25

02364570 PANTHER CREEK NEAR HACODA, AL

LOCATION.--Lat 31°07'15", long 86°11'13", in SE¼SW¼ sec. 19, T. 2 N., R. 19 E., Geneva County, Hydrologic Unit 03140202, on right bank 50 ft upstream from county road bridge, and 5 mi northwest of Hacoda.

DRAINAGE AREA.--26.2 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 140 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 4-11, Mar. 24, 25, Mar. 31 to Apr. 4, Apr. 6 to May 4. Records good except for periods of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--15 years, 42.4 ft^3/s, 21.98 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,590 ft^3/s, Apr. 10, 1975, gage height, 15.32 ft; minimum daily discharge, 1.0 ft^3/s, July 18, 1981, June 5, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 3	1600	478	9.58	June 16	1600	*1,050	*11.85
June 9	0700	847	11.18				

Minimum daily discharge, 3.3 ft^3/s, Sept. 15, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	54	14	62	13	33	e65	e170	5.4	87	21	7.0
2	197	36	13	47	13	52	e45	e130	4.9	61	19	21
3	323	24	13	28	13	108	e35	e80	5.9	98	17	18
4	e220	21	13	21	13	82	e40	e41	9.1	181	15	13
5	e160	39	13	18	12	55	270	29	8.5	278	14	10
6	e100	34	12	19	12	56	e150	22	14	193	12	8.0
7	e65	22	12	22	13	46	e80	17	29	112	10	6.7
8	e50	18	12	24	13	38	e55	15	130	73	9.9	6.0
9	e40	17	12	52	11	31	e40	13	664	62	12	5.5
10	e35	16	12	51	11	27	e50	14	212	53	12	5.0
11	e31	15	29	38	11	25	e70	13	92	41	10	4.4
12	27	13	43	30	11	22	e50	12	63	31	9.2	4.0
13	23	18	30	26	11	20	e35	11	49	28	8.5	3.6
14	21	19	22	23	10	19	e30	10	37	54	8.0	3.4
15	20	17	19	24	11	19	e80	10	189	60	22	3.3
16	19	16	19	24	11	19	e40	9.5	767	113	18	10
17	18	17	20	20	10	18	e30	8.8	420	97	13	11
18	17	17	17	18	10	17	e25	8.0	152	62	11	6.9
19	17	15	16	17	11	16	e22	8.5	89	62	9.1	5.4
20	16	62	15	19	11	15	e20	9.9	67	90	7.8	4.5
21	16	81	14	23	154	17	e35	23	70	70	11	3.9
22	16	51	15	20	166	58	e25	29	203	68	33	3.7
23	15	32	14	17	66	175	e22	20	292	75	30	3.4
24	15	28	15	17	42	e223	e20	20	117	103	28	3.3
25	14	21	14	19	33	e90	e18	16	74	143	17	18
26	14	19	13	18	28	68	e25	12	72	103	12	35
27	13	20	13	14	24	65	e18	10	91	69	9.3	21
28	13	19	13	13	30	43	e16	8.3	111	57	7.8	14
29	13	18	15	13	---	35	e20	7.1	72	40	7.1	11
30	13	16	15	13	---	129	e17	6.3	119	31	6.6	40
31	44	---	26	13	---	e100	---	5.8	---	25	5.8	---
TOTAL	1624	795	523	763	774	1721	1448	789.2	4228.8	2620	426.1	310.0
MEAN	52.4	26.5	16.9	24.6	27.6	55.5	48.3	25.5	141	84.5	13.7	10.3
MAX	323	81	43	62	166	223	270	170	767	278	33	40
MIN	13	13	12	13	10	15	16	5.8	4.9	25	5.8	3.3
CFSM	2.00	1.01	.64	.94	1.06	2.12	1.84	.97	5.38	3.23	.52	.39
IN.	2.31	1.13	.74	1.08	1.10	2.44	2.06	1.12	6.00	3.72	.60	.44

CAL YR 1988 TOTAL 14579.7 MEAN 39.8 MAX 560 MIN 1.0 CFSM 1.52 IN. 20.70
WTR YR 1989 TOTAL 16022.1 MEAN 43.9 MAX 767 MIN 3.3 CFSM 1.68 IN. 22.75

e Estimated

BLACKWATER RIVER MAIN STEM

02369800 BLACKWATER RIVER NEAR BRADLEY, AL
(HYDROLOGIC BENCH-MARK STATION)

LOCATION.--Lat 31°01'39", long 86°42'36", in SE¼SW¼ sec. 24, T. 1 N., R. 13 E., Escambia County, Hydrologic Unit 03140104, in Conecuh National Forest, near left bank on downstream side of bridge on county road, and 1 mi east of Bradley.

DRAINAGE AREA.--87.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 121.87 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records good.

AVERAGE DISCHARGE.--22 years, 141 ft³/s, 21.83 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined, occurred June 4, 1970; gage height, 24.20 ft; maximum daily, 11,100 ft³/s, June 4, 1970; minimum, 18 ft³/s, Sept. 15, 16, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	0600	1,750	12.12	June 16	1900	*4,190	*16.43

Minimum discharge, 34 ft³/s, Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	51	64	303	48	63	176	218	37	209	133	43
2	198	50	60	205	46	70	117	260	37	256	100	124
3	396	48	58	120	46	149	94	161	71	285	81	136
4	461	48	56	94	45	134	82	107	53	319	71	75
5	298	169	55	78	45	99	271	83	46	321	64	57
6	181	119	53	73	46	146	360	70	70	281	59	50
7	135	76	53	77	47	121	233	61	79	252	55	46
8	110	64	53	72	45	93	147	55	484	189	55	43
9	94	59	52	69	44	78	117	57	1410	162	59	41
10	83	56	52	65	43	68	116	55	597	154	56	39
11	75	54	76	63	43	61	140	50	350	134	54	37
12	71	51	106	62	43	57	112	45	410	111	50	36
13	70	69	83	61	42	53	94	43	287	98	48	36
14	61	73	70	60	42	51	81	42	199	116	53	35
15	59	63	64	72	42	49	88	43	418	112	100	53
16	57	59	64	74	41	79	90	40	2640	248	71	124
17	56	80	64	64	40	82	75	39	1860	240	60	63
18	54	71	60	59	39	61	65	37	754	167	52	49
19	53	61	57	57	40	52	80	42	452	141	48	44
20	53	107	59	64	42	48	198	100	313	132	46	41
21	52	123	58	77	188	53	117	158	276	166	49	40
22	56	88	55	65	266	166	88	96	276	171	66	39
23	53	73	54	58	133	320	71	109	323	194	65	39
24	50	67	53	55	83	263	61	234	272	193	54	39
25	49	62	52	53	69	162	56	190	199	233	48	74
26	48	60	50	51	62	118	53	98	152	190	44	98
27	47	78	49	51	58	96	49	68	135	155	42	69
28	47	108	50	49	58	80	56	55	134	125	42	60
29	48	85	53	48	---	71	87	47	156	104	44	57
30	49	71	52	48	---	254	71	42	171	91	43	128
31	48	---	138	49	---	290	---	39	---	85	42	---
TOTAL	3212	2243	1923	2396	1786	3487	3445	2744	12661	5634	1854	1815
MEAN	104	74.8	62.0	77.3	63.8	112	115	88.5	422	182	59.8	60.5
MAX	461	169	138	303	266	320	360	260	2640	321	133	136
MIN	47	48	49	48	39	48	49	37	37	85	42	35
CFSM	1.18	.85	.71	.88	.73	1.28	1.31	1.01	4.81	2.07	.68	.69
IN.	1.36	.95	.82	1.02	.76	1.48	1.46	1.16	5.37	2.39	.79	.77

CAL YR 1988 TOTAL 37780 MEAN 103 MAX 3000 MIN 28 CFSM 1.18 IN. 16.03
WTR YR 1989 TOTAL 43200 MEAN 118 MAX 2640 MIN 35 CFSM 1.35 IN. 18.32

BLACKWATER RIVER MAIN STEM

02369800 BLACKWATER RIVER NEAR BRADLEY, AL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT											
04...	1351	479	29	--	--	20.5	--	--	--	--	--
06...	1525	168	33	--	--	18.0	--	--	--	--	--
19...	0930	57	24	22	4.50	16.0	1.3	756	8.8	90	32
NOV											
15...	1332	64	22	--	--	19.0	--	--	--	--	--
JAN											
04...	1235	98	30	--	--	14.5	--	--	--	--	--
FEB											
22...	1015	290	42	37	3.60	12.0	4.2	760	8.2	76	540
MAR											
15...	1700	51	20	--	--	20.0	--	--	--	--	--
APR											
12...	1110	106	31	27	4.20	13.0	1.4	763	9.2	87	72
AUG											
16...	1100	70	--	21	4.90	22.5	2.5	750	7.7	90	110

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT											
19...	80	4	2	0.63	0.53	1.6	46	0.4	0.30	0	0
FEB											
22...	870	5	5	.98	.62	1.9	43	.4	.40	--	--
APR											
12...	31	4	4	.64	.49	1.7	49	.4	.20	0	0
AUG											
16...	120	4	3	.66	.46	1.4	44	.3	.30	0	0

DATE	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT											
19...	0	5.90	0	7.1	3.4	<.10	7.1	33	23	0.04	5.08
FEB											
22...	--	4.60	0	15	4.5	.10	8.0	45	33	0.06	35.2
APR											
12...	0	5.90	0	1.5	3.5	.10	6.6	32	16	0.04	9.16
AUG											
16...	0	5.70	1	<1.0	3.3	<.10	7.3	30	--	--	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P)
OCT											
19...	<.010	0.220	0.030	<.010	0.47	0.50	<.010	<.010	<.010	--	--
FEB											
22...	<.010	<.100	.020	.030	.48	.50	.010	.010	.010	0.01	0
APR											
12...	<.010	.120	.020	.010	.28	.30	<.010	<.010	<.010	--	--
AUG											
16...	<.010	.150	.020	.020	.38	.40	<.010	<.010	<.010	--	--

BLACKWATER RIVER MAIN STEM

02369800 BLACKWATER RIVER NEAR BRADLEY, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
OCT 19...	170	<1	16	<.5	<1	1	<3	2	250	<5	<4
FEB 22...	540	<1	31	<.5	2	2	<3	5	300	<5	<4
APR 12...	230	<1	23	<.5	<1	1	<3	2	260	<5	<4
AUG 16...	140	<1	16	<.5	<1	1	<3	<1	240	<1	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
OCT 19...	19	<.1	<10	2	<1	<1.0	6	<6	14	--
FEB 22...	64	.7	<10	<1	<1	1.0	11	<6	33	2.6
APR 12...	29	<.1	<10	5	<1	<1.0	7	<6	13	--
AUG 16...	33	<.1	<10	<1	<1	<1.0	4	<6	32	--

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 19...	--	--	--	--	--	--	--	0	0.05	--
FEB 22...	0.6	1.4	0.4	1.4	0.4	0.56	0.03	39	31	66
APR 12...	--	--	--	--	--	--	--	4	1.1	79
AUG 16...	--	--	--	--	--	--	--	4	.76	86

ESCAMBIA RIVER MAIN STEM

02371500 CONECUH RIVER AT BRANTLEY, AL

LOCATION.--Lat 31°34'24", long 86°15'06", in SW¼SE¼ sec. 16, T. 7 N., R. 18 E., Crenshaw County, Hydrologic Unit 03140301, on left bank 10 ft upstream from bridge on U.S. Highway 331 and State Highway 52, 0.5 mi downstream from Moody Mill Creek, 0.8 mi southeast of Brantley, and at mile 112.3.

DRAINAGE AREA.--500 mi^2.

PERIOD OF RECORD.--October 1937 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 226.2 ft above National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers). Prior to Nov. 1, 1938, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--52 years, 657 ft^3/s, 17.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,800 ft^3/s, Feb. 19, 1975, gage height, 24.51 ft; minimum, 22 ft^3/s, Sept. 14, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1900, about 26 ft, present site and datum, March 1929, from information by local residents; discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 19	1600	*7,090	*18.49	June 23	1900	4,940	16.27

Minimum discharge, 61 ft^3/s, Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	74	237	365	260	483	1610	751	118	1100	515	70
2	336	75	227	574	277	530	1300	1220	106	1450	448	68
3	647	88	192	605	285	869	1280	1130	118	1240	384	71
4	689	102	175	642	269	935	1420	999	277	1190	388	90
5	600	193	161	670	252	956	2160	985	182	1650	342	110
6	508	245	151	592	243	984	2180	1030	167	2160	301	98
7	406	253	143	523	241	1020	1850	924	150	2260	285	88
8	296	233	137	418	251	998	1680	586	303	2050	263	82
9	222	236	135	330	250	796	2310	363	706	1920	235	75
10	172	209	132	294	239	606	3420	315	613	1810	210	73
11	143	186	141	272	224	493	3660	281	557	1590	192	70
12	125	194	160	258	208	418	2900	259	635	1020	177	67
13	111	208	174	249	195	369	2620	271	652	652	173	63
14	101	205	173	246	187	336	2940	280	673	589	162	61
15	92	207	167	273	183	313	2840	280	1830	802	166	66
16	86	194	169	331	181	296	2370	256	4940	1140	213	72
17	82	224	178	324	179	289	1820	223	5540	1320	241	75
18	78	261	199	298	176	301	1410	197	4750	1230	213	88
19	75	270	197	275	180	314	1070	183	6760	1160	189	82
20	73	269	185	263	201	288	887	224	6240	1050	165	75
21	133	260	170	266	970	466	782	687	4730	1260	149	72
22	122	289	157	266	1300	658	652	393	3790	1410	131	67
23	119	307	151	256	1190	1820	540	371	4540	1410	119	111
24	109	300	146	247	1000	1940	499	491	4520	1670	110	94
25	94	260	142	235	943	1780	450	322	3570	2350	101	112
26	85	229	137	224	943	1620	384	324	2690	2710	95	185
27	79	212	131	217	834	2030	336	284	2300	2810	90	257
28	76	208	131	212	618	2470	303	233	1560	2260	85	260
29	74	198	141	209	---	2090	281	192	971	1630	81	278
30	73	203	154	207	---	2270	271	161	908	1090	78	297
31	73	---	179	231	---	2060	---	135	---	767	74	---
TOTAL	5979	6392	5072	10372	12279	30798	46225	14351	64896	46750	6375	3277
MEAN	193	213	164	335	439	993	1541	463	2163	1508	206	109
MAX	689	307	237	670	1300	2470	3660	1220	6760	2810	515	297
MIN	73	74	131	207	176	288	271	136	106	589	74	61
CFSM	.39	.43	.33	.67	.88	1.99	3.08	.93	4.33	3.02	.41	.22
IN.	.44	.48	.38	.77	.91	2.29	3.44	1.07	4.83	3.48	.47	.24

CAL YR 1988 TOTAL 150748 MEAN 412 MAX 4290 MIN 27 CFSM .82 IN. 11.22
WTR YR 1989 TOTAL 252766 MEAN 693 MAX 6760 MIN 61 CFSM 1.39 IN. 18.81

02372250 PATSALIGA CREEK NEAR BRANTLEY, AL

LOCATION.--Lat 31°35'46", long 86°24'20", in SE¼NE¼ sec. 12, T. 7 N., R. 16 E., Crenshaw County, Hydrologic Unit 03140302, near left bank on downstream side of bridge on State Highway 106, 3.0 mi north of Leon, and 10.9 mi northwest of Brantley.

DRAINAGE AREA.--442 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 220 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--15 years, 597 ft^3/s, 18.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,400 ft^3/s, Jan. 27, 1978, gage height, 22.05 ft; maximum gage height, 22.21 ft, Feb. 19, 1975; minimum discharge, 20 ft^3/s, Aug. 10, 11, 1986.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 19	0500	*9,110	*20.79				

Minimum discharge, 61 ft^3/s, Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	74	492	583	256	327	1380	417	110	1000	365	70
2	160	81	374	611	275	482	1360	747	103	1110	335	79
3	370	86	271	667	269	938	1490	721	99	1480	299	75
4	471	86	231	671	234	983	1360	704	100	1830	266	82
5	494	137	211	719	212	937	1590	677	102	2160	265	79
6	454	227	198	557	201	890	1940	455	102	2220	260	72
7	309	288	190	347	216	901	1810	316	162	1880	214	69
8	205	275	184	297	217	720	2050	266	196	1450	191	68
9	150	226	182	274	195	575	2850	238	530	1280	171	67
10	121	188	176	256	179	445	3000	225	755	1190	156	66
11	106	163	184	240	168	367	2650	223	656	923	144	67
12	97	147	211	231	160	328	2440	220	604	660	137	64
13	89	158	227	226	156	302	2820	202	464	492	130	62
14	81	203	225	227	154	283	2990	194	382	464	123	62
15	77	214	220	254	155	268	2430	187	825	1200	148	71
16	73	197	216	309	156	260	1710	184	2690	1080	142	87
17	70	207	233	316	155	260	1240	173	3920	1130	217	97
18	68	224	248	295	155	266	1210	162	5230	1090	197	115
19	67	210	236	258	159	330	1190	157	8140	980	167	106
20	66	228	221	241	187	301	947	167	4730	761	138	94
21	158	425	207	248	298	282	614	673	3000	892	137	82
22	152	438	197	249	547	445	510	410	2270	967	121	77
23	141	399	191	238	634	902	460	292	2620	1140	110	79
24	115	322	187	226	699	1170	416	280	3080	1470	102	80
25	97	248	184	211	656	1220	368	242	2430	1750	97	89
26	85	213	180	198	474	1390	334	222	1300	1690	91	156
27	79	196	177	191	312	1730	307	194	855	1400	85	226
28	75	244	174	188	289	1950	289	163	679	1000	78	215
29	73	385	183	186	---	1090	271	142	589	593	75	185
30	72	509	202	186	---	1400	298	128	1020	430	78	182
31	73	---	321	221	---	1630	---	119	---	363	71	---
TOTAL	4743	6998	6933	9921	7768	23372	42324	9500	47743	36075	5110	2923
MEAN	153	233	224	320	277	754	1411	306	1591	1164	165	97.4
MAX	494	509	492	719	699	1950	3000	747	8140	2220	365	226
MIN	66	74	174	186	154	260	271	119	99	363	71	62
CFSM	.35	.53	.51	.72	.63	1.71	3.19	.69	3.60	2.63	.37	.22
IN.	.40	.59	.58	.83	.65	1.97	3.56	.80	4.02	3.04	.43	.25

CAL YR 1988 TOTAL 131166 MEAN 358 MAX 2450 MIN 29 CFSM .81 IN. 11.04
WTR YR 1989 TOTAL 203410 MEAN 557 MAX 8140 MIN 62 CFSM 1.26 IN. 17.12

ESCAMBIA RIVER MAIN STEM

02372430 (NWS 01-6937-07) CONECUH RIVER AT RIVER FALLS, AL

LOCATION.--Lat 31°20'53", long 86°31'46", in NW¼NW¼ sec. 2, T. 4 N., R. 15 E., Covington County, Hydrologic Unit 03140301, on downstream handrail of U.S. Highway 84 (State Highway 55) bridge, 0.8 mi east of River Falls.

DRAINAGE AREA.--1,277 mi^2.

PERIOD OF RECORD.--November 1928 to September 1979, October 1980 to current year (gage heights only). October 1971 to September 1979, October 1980 to current year in reports of Geological Survey. November 1928 to December 1971 in reports of National Weather Service.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 120.80 ft above National Geodetic Vertical Datum of 1929. Prior to June 23, 1934, nonrecording gage located on left bank 1,400 ft upstream at datum 2.88 ft higher. June 23, 1934, to Mar. 3, 1953, nonrecording gage on downstream side of bridge located 1,000 ft upstream at datum 2.88 ft higher.

REMARKS.--Some regulation at low flow by Point A Lake 1.0 mi upstream and Gantt Reservoir 8 mi upstream.

COOPERATION.--Records provided by National Weather Service.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 52.5 ft, Mar. 15, 1929; minimum gage height, -1.8 ft, Sept. 11, 1938.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 30.95 ft, June 17; minimum gage height, 1.50 ft, Nov. 26.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.62	1.59	1.58	1.80	1.56	4.07	8.60	8.05	1.55	7.50	1.56	1.55
2	1.80	1.56	1.55	1.68	1.55	4.42	9.16	10.30	1.55	7.08	1.58	1.55
3	1.55	1.55	1.55	1.55	1.55	6.05	8.29	9.67	1.55	7.82	1.55	1.55
4	1.55	1.55	1.57	1.55	1.55	8.41	7.95	7.91	1.55	8.14	1.55	1.58
5	1.56	2.44	1.55	1.57	1.57	9.80	14.98	5.40	1.62	8.77	1.55	1.57
6	1.55	4.03	1.55	1.56	1.55	7.92	15.30	4.17	1.57	11.84	1.55	1.55
7	1.54	3.71	1.55	1.55	1.82	7.06	12.83	2.88	1.83	9.25	1.56	1.56
8	1.55	3.98	1.58	1.60	1.55	7.64	10.72	1.55	2.95	8.27	1.57	1.55
9	1.55	2.42	1.55	1.58	1.59	5.77	11.14	1.58	3.74	7.80	1.54	1.55
10	1.55	1.59	1.57	1.55	1.55	4.73	13.90	1.56	4.35	4.17	1.55	1.60
11	1.56	1.55	1.61	1.57	1.55	3.95	16.42	2.36	3.86	3.45	1.55	1.58
12	1.55	1.90	1.56	1.55	1.55	3.59	15.96	2.65	2.18	2.84	1.55	1.55
13	1.55	1.59	1.57	1.58	1.57	2.62	14.37	1.57	3.45	1.56	1.55	1.55
14	1.62	1.55	1.54	2.87	1.56	1.55	12.84	1.55	4.22	1.59	1.59	1.56
15	1.57	1.55	1.55	3.22	1.58	1.55	12.23	1.55	4.95	1.56	1.55	1.55
16	1.54	1.56	1.59	4.10	1.55	1.55	13.08	1.58	25.12	2.11	1.56	1.55
17	1.55	1.56	1.55	2.50	1.56	1.55	11.25	1.56	30.95	2.95	1.54	3.21
18	1.55	1.55	1.63	1.95	1.55	1.58	9.42	1.55	27.71	1.67	1.55	2.77
19	1.55	1.55	1.56	1.62	1.55	1.58	6.18	1.55	22.38	1.56	1.56	1.55
20	1.58	1.55	1.55	2.41	2.03	1.54	2.70	3.13	25.45	1.55	1.55	1.62
21	1.60	1.55	1.55	1.87	5.17	2.25	4.89	3.80	23.87	1.55	1.55	1.55
22	1.89	1.58	1.56	1.62	6.45	7.35	3.12	4.19	22.94	1.56	1.57	1.56
23	1.55	1.55	1.55	1.57	6.89	9.13	2.90	4.46	19.85	3.06	1.55	1.55
24	1.55	1.55	1.57	1.55	5.30	9.47	2.65	3.20	16.60	3.42	1.56	1.55
25	1.58	1.56	1.60	1.55	4.72	9.23	2.48	3.91	14.65	3.13	1.58	1.63
26	1.56	1.50	1.55	1.56	4.90	8.61	1.99	2.87	14.17	3.75	1.54	2.80
27	1.55	1.57	1.55	1.55	4.67	7.95	1.55	1.62	13.35	2.94	1.56	2.19
28	1.55	1.55	1.71	1.59	4.81	8.19	1.55	1.58	11.71	1.55	1.55	1.59
29	1.55	1.56	1.58	1.55	---	7.72	1.54	1.57	9.96	1.76	1.56	1.56
30	1.55	1.55	1.55	1.55	---	12.26	4.31	1.55	8.42	1.82	1.56	1.55
31	1.57	---	1.55	1.58	---	11.91	---	1.55	---	1.57	1.55	---
MEAN	1.58	1.86	1.57	1.84	2.67	5.84	8.48	3.30	10.93	4.12	1.56	1.72
MAX	1.89	4.03	1.71	4.10	6.89	12.26	16.42	10.30	30.95	11.84	1.59	3.21
MIN	1.54	1.50	1.54	1.55	1.55	1.54	1.54	1.55	1.55	1.55	1.54	1.55

CAL YR 1988 MEAN 3.30 MAX 18.04 MIN 1.50
WTR YR 1989 MEAN 3.78 MAX 30.95 MIN 1.50

02373000 SEPULGA RIVER NEAR MCKENZIE, AL

LOCATION.--Lat 31°27'47", long 86°47'16", in SE¼SE¼ sec. 30, T. 6 N., R. 13 E., Conecuh County, Hydrologic Unit 03140303, on left bank 100 ft downstream from bridge on U.S. Highway 31, 0.38 mi upstream from Old Town Creek, 2.5 mi upstream from Piney Woods Creek, 5.5 mi downstream from Persimmon Creek, and 7 mi southwest of McKenzie.

DRAINAGE AREA.--470 mi².

PERIOD OF RECORD.--October 1937 to September 1967, October 1968 to September 1970 (annual peak discharge only), October 1974 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Recording gage. Datum of gage is 155.96 ft above National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers). Prior to Mar. 25, 1939, nonrecording gage, and Mar. 26, 1939, to July 29, 1960, recording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 4 to Nov. 15. Records good except for period of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--45 years (water years 1938-67, 1975-89), 659 ft³/s, 19.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,100 ft³/s, Mar. 17, 1938; maximum gage height, 24.70 ft, Feb. 26, 1961; minimum discharge, 3.5 ft³/s, Sept. 15, 28, 29, 30, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929 reached a stage of 33.0 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 7	1800	6,790	12.25	June 18	1700	5,320	10.30
Apr. 12	1600	*6,930	*12.44				

Minimum discharge, 29 ft³/s, Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	e130	545	779	284	328	2810	522	130	1940	276	45
2	147	e120	324	1420	272	451	1980	966	127	1890	252	41
3	449	e110	251	1020	229	1080	1550	1200	116	1750	240	48
4	e700	e110	214	840	204	1880	988	891	108	1530	206	52
5	e350	e160	190	694	192	1560	2130	529	104	1800	181	51
6	e230	e250	176	419	183	1520	4050	372	108	1690	161	65
7	e180	e200	165	332	178	1860	6420	312	109	1250	144	69
8	e150	e170	156	298	177	1320	5570	273	148	872	131	53
9	e140	e150	150	274	175	943	3340	251	707	739	119	45
10	e130	e140	147	253	173	645	3630	227	1230	896	109	40
11	e120	e130	160	236	166	499	5260	207	772	1020	102	36
12	e110	e120	171	221	159	427	6750	190	504	648	97	34
13	e100	e200	200	214	153	380	5750	181	344	643	96	32
14	e100	e250	222	229	149	346	3470	174	279	481	93	32
15	e110	e170	203	338	148	319	2740	165	566	517	96	37
16	e120	187	183	448	146	304	2590	158	2740	1310	87	65
17	e110	172	178	424	144	292	2140	153	4030	1180	86	79
18	e100	290	202	334	147	417	1820	149	5170	1380	85	64
19	e100	297	226	271	154	366	1420	167	4600	944	80	66
20	e95	269	196	257	156	299	873	182	3480	936	93	71
21	e200	774	172	261	163	365	636	346	3410	634	98	53
22	e400	800	162	278	448	771	544	887	3050	596	86	43
23	e350	517	156	264	1230	1340	476	686	2360	538	75	41
24	e220	339	154	228	1070	1890	419	494	1740	500	67	37
25	e170	247	152	206	869	1690	372	407	1460	552	62	43
26	e150	207	149	193	553	1440	334	312	903	551	57	56
27	e130	236	148	185	359	1140	305	255	623	528	57	57
28	e120	606	148	180	315	711	280	212	501	667	49	59
29	e110	877	147	178	---	533	262	180	497	815	46	74
30	e120	771	152	191	---	1440	281	157	1000	431	43	129
31	e140	---	198	228	---	2750	---	142	---	319	43	---
TOTAL	5744	8999	5997	11693	8596	29306	69190	11347	40916	29547	3417	1617
MEAN	185	300	193	377	307	945	2306	366	1364	953	110	53.9
MAX	700	877	545	1420	1230	2750	6750	1200	5170	1940	276	129
MIN	93	110	147	178	144	292	262	142	104	319	43	32
CFSM	.39	.64	.41	.80	.65	2.01	4.91	.78	2.90	2.03	.23	.11
IN.	.45	.71	.47	.93	.68	2.32	5.48	.90	3.24	2.34	.27	.13

CAL YR 1988 TOTAL 146469 MEAN 400 MAX 4620 MIN 14 CFSM .85 IN. 11.59
WTR YR 1989 TOTAL 226369 MEAN 620 MAX 6750 MIN 32 CFSM 1.32 IN. 17.92

e Estimated

02374250 (NWS 01-1084-07) CONECUH RIVER AT BREWTON, AL

LOCATION.--Lat 31°04'01", long 87°02'40", in SW¼NE¼ sec. 9, T. 1 N., R. 10 E., Escambia County, Hydrologic Unit 03140304, on downstream side of bridge on State Highway 41, 1.0 mi south of East Brewton, and 2.7 mi upstream from Murder Creek.

DRAINAGE AREA.--2,661 mi^2.

PERIOD OF RECORD.--February 1929 to current year (gage heights only). October 1971 to current year in reports of Geological Survey. July 1930 to December 1971 collected by National Weather Service. July 1930 to December 1971 published in "Daily River Stages" reports of National Weather Service.

REVISED RECORDS.--WDR AL-84-1: Drainage area. In reports of National Weather Service, the datum of the gage was erroneously listed as 57.2 ft. The datum of the gage has remained unchanged since station was established.

GAGE.--Nonrecording gage. Datum of gage is 53.10 ft above National Geodetic Vertical Datum of 1929.

COOPERATION.--Gage-height record was provided by National Weather Service.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 36.6 ft, Mar. 15, 1929; minimum gage height, -4.15 ft, July 4, 1988.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 18.21 ft, June 20; minimum gage height, -3.56 ft, Sept. 18.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.17	-2.04	-1.67	-1.83	-2.40	.12	12.05	4.05	.98	3.11	6.18	-1.49
2	1.81	-2.07	-1.69	-1.86	-2.47	.10	12.14	4.07	1.44	2.57	5.57	-1.56
3	3.49	-2.15	-1.70	.41	-2.48	1.59	12.10	5.71	1.69	4.44	4.92	-1.07
4	5.95	-2.17	-1.74	.43	-2.57	5.78	11.38	4.89	1.81	4.51	4.48	-1.18
5	5.82	-2.16	-1.82	.47	-2.78	5.91	12.71	4.72	1.99	5.01	3.77	-1.38
6	5.19	-2.18	-1.88	.47	-2.83	9.21	12.83	4.51	2.11	5.43	3.60	-1.61
7	4.73	-1.07	-1.89	.59	-2.87	10.67	12.87	3.36	2.13	5.97	3.19	-1.75
8	4.18	-1.34	-1.93	.92	-2.99	11.87	12.81	3.02	1.06	5.56	3.06	-2.11
9	3.14	-1.69	-2.11	-1.20	-3.01	12.01	12.77	2.88	1.32	5.41	2.87	2.94
10	2.21	-1.81	-2.12	-1.35	-3.06	11.77	12.56	2.37	2.03	4.13	2.71	-3.15
11	1.73	-1.85	-2.14	-1.38	-3.17	11.42	12.51	2.18	5.30	4.07	2.20	-3.28
12	1.27	-1.86	-2.17	-1.47	-3.19	11.08	12.49	1.49	3.49	4.04	2.13	-3.31
13	1.02	-1.89	-2.20	-1.49	-3.24	7.49	12.15	.97	1.12	4.00	1.92	-3.38
14	.37	-1.42	-2.24	-1.56	-3.26	4.78	13.69	.92	.52	3.77	1.59	-3.40
15	.26	-1.46	-2.47	-1.58	-3.28	2.34	14.46	.43	8.77	2.99	1.07	-3.52
16	.11	-1.47	-2.49	-1.63	-3.29	1.70	14.29	.17	15.17	2.81	1.01	-3.50
17	.62	-1.51	-2.50	-1.65	-3.33	1.29	14.02	.05	17.47	4.97	.79	-3.51
18	.84	-1.54	-2.52	-1.69	-3.38	.82	13.72	.96	18.12	5.13	.63	-3.56
19	-1.33	-1.53	-2.58	-1.69	-3.44	.71	13.61	.91	18.13	5.32	.20	.36
20	-1.74	-1.60	-2.57	-1.70	-3.46	.38	13.16	.58	18.21	6.69	.13	.19
21	-1.58	-1.08	-2.60	-1.71	-2.42	.36	12.48	.59	18.01	6.71	.04	.03
22	-1.78	-1.21	-2.61	-1.89	-2.19	.30	11.18	1.21	15.57	6.74	.51	.40
23	-1.80	-1.23	-2.62	-1.95	.54	9.59	9.75	3.64	14.76	7.67	.38	1.05
24	-1.76	-1.24	-2.65	-1.99	1.21	11.17	7.14	9.77	12.61	7.93	.29	1.13
25	-1.52	-1.37	-2.68	-2.14	1.25	11.71	6.68	11.91	10.29	8.07	.07	1.30
26	-1.11	-1.40	-2.69	-2.06	1.14	11.68	6.02	12.16	7.98	8.10	.22	1.31
27	-1.29	-1.42	-2.70	-2.10	1.11	11.46	5.54	8.01	6.13	8.09	.76	1.35
28	-1.22	-1.41	-2.76	-2.15	.75	10.11	4.39	5.39	5.65	7.29	-1.14	1.36
29	-1.48	-1.40	-2.79	-2.28	---	9.77	4.22	3.42	4.18	6.60	-1.19	1.41
30	-1.70	-1.55	-2.85	-2.28	---	11.81	3.51	1.76	2.72	8.52	-1.20	2.03
31	1.57	---	-2.07	-2.31	---	11.97	---	.22	---	8.40	-1.57	---
MEAN	.91	-1.60	-2.30	-1.38	-2.11	6.81	10.97	3.43	7.36	5.65	1.59	-.93
MAX	5.95	-1.07	-1.67	.92	1.25	12.01	14.46	12.16	18.21	8.52	6.18	2.94
MIN	-1.80	-2.18	-2.85	-2.31	-3.46	.10	3.51	.05	.52	2.57	-1.57	-3.56

CAL YR 1988 MEAN 2.92 MAX 13.83 MIN -4.15
WTR YR 1989 MEAN 2.39 MAX 18.21 MIN -3.56

02374500 MURDER CREEK NEAR EVERGREEN, AL

LOCATION.--Lat 31°25'06", long 86°59'12", in SW¼NW¼ sec. 8, T. 5 N., R. 11 E., Conecuh County, Hydrologic Unit 03140304, on left bank 30 ft upstream from bridge on U.S. Highway 31, 1 mi upstream from Louisville & Nashville Railroad bridge, and 2.5 mi southwest of Evergreen.

DRAINAGE AREA.--176 mi^2.

PERIOD OF RECORD.--October 1937 to current year.

REVISED RECORDS.--WDR AL-79-1: 1975(P), 1976(P), 1978(P). WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 178.29 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Mar. 25, 1939, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--52 years, 283 ft^3/s, 21.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft^3/s, Feb. 25, 1961, gage height, 16.13 ft; maximum gage height, 16.65 ft, Mar. 16, 1938; minimum discharge, 38 ft^3/s, Sept. 2, 3, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1900, 26.6 ft, present site and datum, March 1929, from information by local residents (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 30	1000	*2,400	*10.56	June 16	1000	2,280	10.46

Minimum discharge, 100 ft^3/s, Sept. 11, 12, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	122	187	304	183	225	736	359	131	387	259	116
2	219	121	174	348	160	266	368	531	205	493	213	127
3	323	118	165	239	151	471	287	424	148	721	190	130
4	324	116	146	190	145	445	281	237	142	578	176	133
5	193	148	169	177	140	297	1040	209	153	393	162	119
6	142	231	159	173	143	366	1480	199	158	355	150	113
7	127	169	157	169	146	302	916	176	146	313	142	108
8	121	131	156	162	143	220	479	160	262	254	140	106
9	116	124	152	157	137	190	444	155	590	311	138	104
10	116	122	154	150	133	175	599	163	466	323	136	103
11	116	123	188	151	132	164	1200	170	233	244	134	101
12	112	126	241	154	133	155	919	153	232	201	132	108
13	108	168	221	162	133	150	521	143	205	183	139	119
14	103	258	186	197	134	143	388	142	161	244	135	106
15	103	212	171	305	136	136	470	149	758	281	134	104
16	104	164	179	283	134	234	505	148	2110	469	137	184
17	105	190	199	214	133	233	379	139	1460	519	159	157
18	105	311	176	178	132	175	300	133	833	327	161	120
19	104	292	178	166	145	154	269	177	425	261	133	110
20	105	268	162	184	147	146	264	258	394	263	125	105
21	136	477	160	204	285	308	258	497	468	232	124	102
22	258	431	162	176	466	433	265	458	570	252	124	101
23	202	238	164	157	354	547	229	325	492	230	122	102
24	142	194	162	149	203	507	209	409	310	275	126	106
25	122	192	159	145	170	358	196	281	255	374	121	129
26	115	197	155	142	160	262	187	200	231	527	114	239
27	114	248	150	141	156	230	178	164	239	369	113	199
28	113	358	158	141	172	207	170	148	244	371	106	154
29	113	290	188	141	---	226	175	137	346	444	106	178
30	118	217	178	146	---	1610	211	128	426	329	108	229
31	120	---	192	186	---	1250	---	123	---	261	111	---
TOTAL	4418	6356	5348	5791	4806	10585	13923	7095	12793	10784	4370	3912
MEAN	143	212	173	187	172	341	464	229	426	348	141	130
MAX	324	477	241	348	466	1610	1480	531	2110	721	259	239
MIN	103	116	146	141	132	136	170	123	131	183	106	101
CFSM	.81	1.20	.98	1.06	.98	1.94	2.64	1.30	2.42	1.98	.80	.74
IN.	.93	1.34	1.13	1.22	1.02	2.24	2.94	1.50	2.70	2.28	.92	.83

CAL YR 1988 TOTAL 81071 MEAN 222 MAX 1980 MIN 61 CFSM 1.26 IN. 17.14
WTR YR 1989 TOTAL 90181 MEAN 247 MAX 2110 MIN 101 CFSM 1.40 IN. 19.06

02376500 PERDIDO RIVER AT BARRINEAU PARK, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°41'25", long 87°26'25", in NW¼ sec. 23, T. 4 S., R. 6 E., Baldwin County, Ala., Hydrologic Unit 03140106, on right bank 25 ft downstream from bridge on county road, 1,000 ft downstream from Alligator Creek, 0.5 mi southwest of Barrineau Park, and 27 mi upstream from mouth.

DRAINAGE AREA.--394 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1941 to current year.

REVISED RECORDS.--WSP 1384: Drainage area. WDR FL-76-4: 197_-75 (M).

GAGE.--Water-stage recorder. Datum of gage is 25.77 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 22, 1949, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--48 years, 759 ft³/s, 26.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,000 ft³/s, Apr. 15, 1955, gage height, 23.94 ft, from rating curve extended above 11,400 ft³/s, based on slope-area study made in 1955; minimum, 188 ft³/s, Oct. 12-18, 1973; minimum gage height, 1.24 ft Oct. 1-6, 15-17, 20-25, 28-31, Nov. 1-3, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 15, 1929, reached a stage of 25.7 ft present datum, from information by local resident (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	0800	*16,800	*18.85	June 16	2300	7,190	14.12

Minimum discharge, 241 ft³/s May 19, gage height, 1.53 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1090	355	378	480	321	346	470	435	329	1720	553	376
2	1720	352	370	420	318	358	406	651	316	1700	496	382
3	2200	343	361	386	315	488	374	555	320	2240	465	358
4	1460	339	355	368	311	685	353	451	323	2800	424	341
5	981	390	350	353	308	666	673	393	328	2820	395	332
6	767	481	346	347	308	628	1240	355	398	2040	372	327
7	622	461	345	352	307	558	1180	321	385	1520	355	322
8	527	411	343	348	306	466	1410	295	2580	1120	343	316
9	476	382	343	342	303	417	871	279	14700	1030	342	313
10	454	367	341	335	299	385	558	280	9460	954	337	309
11	437	359	386	334	297	359	491	276	5250	852	331	305
12	422	350	488	334	296	340	435	268	2520	716	326	303
13	406	389	479	335	297	326	396	257	1060	614	323	303
14	394	459	441	340	298	317	371	254	702	565	318	300
15	386	460	416	371	299	309	378	255	1060	559	333	303
16	381	427	399	426	296	341	394	254	4830	599	328	314
17	376	410	389	419	293	368	382	255	6160	814	325	310
18	371	389	384	398	302	332	358	247	4240	731	329	302
19	367	376	375	384	320	314	341	318	2710	784	329	298
20	364	559	367	379	328	303	334	383	1750	760	345	297
21	361	561	363	444	459	326	334	718	1890	1010	387	298
22	361	462	361	461	714	679	326	892	1800	1040	404	300
23	357	425	358	433	654	1160	314	1240	1770	1220	374	302
24	356	403	354	413	522	1060	301	2570	1180	1450	367	305
25	359	388	352	384	463	815	290	2390	1140	1220	355	359
26	350	380	347	359	412	707	281	1460	979	1020	336	431
27	345	382	341	347	378	595	274	1020	812	985	330	464
28	343	393	344	339	355	468	268	652	750	877	362	415
29	343	389	367	331	---	403	279	456	930	704	407	392
30	343	384	364	323	---	471	298	385	1160	585	431	534
31	343	---	368	321	---	558	---	352	---	597	392	---
TOTAL	18062	12226	11575	11606	10079	15548	14380	18917	71832	35646	11514	10211
MEAN	583	408	373	374	360	502	479	610	2394	1150	371	340
MAX	2200	561	488	480	714	1160	1410	2570	14700	2820	553	534
MIN	343	339	341	321	293	303	268	247	316	559	318	297
AC-FT	35830	24250	22960	23020	19990	30840	28520	37520	142500	70700	22840	20250
CFSM	1.48	1.03	.95	.95	.91	1.27	1.22	1.55	6.08	2.92	.94	.86
IN.	1.71	1.15	1.09	1.10	.95	1.47	1.36	1.79	6.78	3.37	1.09	.96

CAL YR 1988 TOTAL 237726 MEAN 650 MAX 3890 MIN 212 AC-FT 471500 CFSM 1.65 IN. 22.45
WTR YR 1989 TOTAL 241596 MEAN 662 MAX 14700 MIN 247 AC-FT 479200 CFSM 1.68 IN. 22.81

02376500 PERDIDO RIVER AT BARRINEAU PARK, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1957 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV											
30...	1030	385	23	6.10	14.5	2.2	8.8	85	110	29	4
MAR											
07...	1400	547	26	5.40	13.5	2.8	9.6	92	290	59	5
JUN											
07...	1200	383	25	6.20	23.0	1.8	6.8	79	170	280	4
AUG											
17...	1400	323	24	6.10	25.0	1.9	8.4	101	K520	K8	4

DATE	HARDNESS, NONCARB F.WH.W.,FET, (MG/L CACO3)	HARDNESS NONCARBONATE (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WAT.DIS FIELD, INC.T., (MG/L HCO3)	ALKALINITY LAB (MG/L AS CACO3)	ALKALINITY WAT.DIS FIELD INC.T. (MG/L CACO3)
NOV											
30...	2	2	.74	.62	2.1	48	.4	.40	<1	2.0	<1
MAR											
07...	3	3	.85	.71	2.2	46	.4	.40	<1	2.0	<1
JUN											
07...	2	2	.83	.57	2.5	52	.5	.40	<1	2.0	<1
AUG											
17...	2	2	.80	.59	2.3	51	.5	.30	2	2.0	2

DATE	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
NOV											
30...	3.1	3.3	4.0	<.10	8.1	25	21	.03	26	<.010	.24
MAR											
07...	15	4.6	4.0	.10	7.8	23	22	.03	34	<.010	.15
JUN											
07...	2.4	1.0	3.8	.10	7.8	18	18	.02	19	<.010	.18
AUG											
17...	3.1	<1.0	4.0	.10	7.3	15	--	.02	13	<.010	.23

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, NH4, WATER, DIS., (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)
NOV											
30...	.030	.020	.03	--	<.20	.020	<.010	<.010	30	<1	19
MAR											
07...	<.010	<.010	--	--	.30	.020	<.010	<.010	90	<1	36
JUN											
07...	<.010	.030	.04	--	.20	.020	<.010	<.010	60	<1	20
AUG											
17...	.030	<.010	--	.87	.90	.020	<.010	<.010	50	<1	17

02376500 PERDIDO RIVER AT BARRINEAU PARK, FL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)
NOV										
30...	<.5	1	<1	<3	<1	42	<5	<4	18	<.1
MAR										
07...	<.5	5	<1	<3	1	100	<5	<4	45	<.1
JUN										
07...	<.5	<1	<1	<3	<1	140	<1	<4	25	.3
AUG										
17...	<.5	<1	<1	<3	<1	190	1	<4	13	.1

DATE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV										
30...	<10	<1	<1	<1	7	<6	8	2	2.1	50
MAR										
07...	<10	4	<1	<1	9	<6	11	18	27	44
JUN										
07...	<10	<1	<1	<1	8	<6	3	5	5.2	100
AUG										
17...	<10	1	<1	<1	9	<6	8	7	6.1	86

02377570 STYX RIVER NEAR ELSANOR, AL

LOCATION.--Lat 30°36'20", long 87°32'50", in SW¼ sec. 14, T. 5 S., R. 5 E., Baldwin County, Hydrologic Unit 03140106, near left bank on downstream side of bridge on county road 87, 0.2 mi downstream of Cowpen Creek, 5 mi northeast of Elsanor, and 11.4 mi upstream from mouth.

DRAINAGE AREA.--192 mi².

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (from topographic map).

REMARKS.--Estimated daily discharges: December 31 to January 6 and February 5-8. Records good except those for period of estimated record, which are fair. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft³/s, June 9, 1989, gage height, 20.18 ft; minimum discharge, 108 ft³/s, July 1, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	1400	*17,500	*20.18	June 16	1300	7,540	15.30

Minimum discharge, 122 ft³/s, Sept. 24.

REVISIONS.--The maximum discharge for water year 1988 has been revised to 4,700 ft³/s, Sept. 17, 1988, gage height, 13.18 ft. Peak discharge for Aug. 10, 1988 has been revised to 4,600 ft³/s, gage height, 13.09 ft. Peak discharge for Aug. 21, 1988 has been revised to 3,500 ft³/s, gage height, 12.00 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	638	236	224	e208	182	188	297	267	180	1870	372	189
2	1070	233	217	e210	180	201	252	369	168	1290	328	172
3	1560	226	213	e207	180	254	225	308	170	2060	292	161
4	993	223	211	e204	179	266	212	234	170	2300	246	154
5	645	262	208	e204	e176	263	431	197	173	1850	220	152
6	493	268	205	e203	e172	242	677	179	225	1060	203	151
7	415	250	204	204	e168	224	641	165	202	695	196	147
8	371	234	204	206	e164	210	439	155	2830	580	196	144
9	346	226	205	202	161	199	321	148	16400	586	194	141
10	332	221	204	196	160	189	276	148	8980	621	182	139
11	318	217	292	195	158	183	284	149	1740	442	174	141
12	306	213	387	195	158	178	260	144	817	360	168	137
13	291	266	325	195	157	174	236	139	560	317	165	142
14	281	296	281	198	158	172	218	137	436	324	163	145
15	273	281	255	225	159	170	227	137	1140	311	199	140
16	269	263	240	240	157	171	221	135	5740	304	188	140
17	266	313	230	229	156	177	202	131	3710	376	171	135
18	261	262	222	213	158	172	190	129	1480	359	188	131
19	257	240	216	206	168	167	182	197	875	357	195	128
20	254	639	213	211	174	163	181	306	757	299	207	127
21	252	466	213	247	319	170	182	776	805	747	211	126
22	250	332	213	245	410	484	176	1230	807	506	210	125
23	244	285	211	226	356	958	170	876	1200	455	218	124
24	242	263	209	211	292	749	163	1240	1460	562	233	124
25	249	249	206	202	237	563	159	1220	1220	550	190	135
26	245	242	203	196	213	411	154	714	882	461	171	169
27	240	245	201	193	201	324	150	492	596	417	164	191
28	236	246	202	190	195	272	151	344	482	350	208	179
29	234	236	203	187	---	244	154	259	551	319	256	168
30	233	229	203	185	---	324	164	217	749	300	269	355
31	232	---	e205	185	---	342	---	195	---	335	220	---
TOTAL	12296	8162	7025	6418	5548	8804	7595	11337	55505	21363	6597	4612
MEAN	397	272	227	207	198	284	253	366	1850	689	213	154
MAX	1560	639	387	247	410	958	677	1240	16400	2300	372	355
MIN	232	213	201	185	156	163	150	129	168	299	163	124
CFSM	2.07	1.42	1.18	1.08	1.03	1.48	1.32	1.90	9.64	3.59	1.11	.80
IN.	2.38	1.58	1.36	1.24	1.07	1.71	1.47	2.20	10.75	4.14	1.28	.89

CAL YR 1988 TOTAL 167648 MEAN 458 MAX 3600 MIN 110 CFSM 2.39 IN. 32.48
WTR YR 1989 TOTAL 155262 MEAN 425 MAX 16400 MIN 124 CFSM 2.22 IN. 30.08

e Estimated

02377960 BLACKWATER RIVER NEAR ELSANOR, AL

LOCATION.--Lat 30°30'41", long 87°34'54", in NW¼ sec. 21, T. 6 S., R. 5 E., Baldwin County, Hydrologic Unit 03140106, near left bank on downstream side of bridge on county road 87, 3 mi south of Elsanor, and 13.4 mi upstream from mouth.

DRAINAGE AREA.--56.6 mi².

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (from topographic map).

REMARKS.--Estimated daily discharges: October 7 to November 17. Records good except those for period of estimated record, which are fair. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,510 ft³/s, June 9, 1989, gage height, 10.48 ft; minimum discharge, 29 ft³/s, May 31, June 1, 2, 5, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	0800	*9,510	*10.48	June 16	1700	3,650	8.63

Minimum discharge, 34 ft³/s, May 18, 19.

REVISIONS.--The maximum discharge for water year 1988 has been revised to 3,240 ft³/s, Aug. 9, 1988, gage height, 8.41 ft. Peak discharge for Aug. 16, 1988 has been revised to 2,400 ft³/s, gage height, 7.87 ft. Peak discharge for Sept. 4, 1988 has been revised to 2,270 ft³/s, gage height, 7.78 ft. Peak discharge for Sept. 17, 1988 has been revised to 2,510 ft³/s, gage height, 7.94 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	291	e67	76	77	61	59	71	81	38	162	68	68
2	258	e67	74	80	61	57	58	136	38	245	59	52
3	579	e66	72	75	61	71	54	124	43	765	53	47
4	340	e66	72	72	60	84	53	60	42	564	48	45
5	196	e80	72	68	58	70	95	48	41	287	45	52
6	146	e95	71	67	59	67	160	44	59	209	44	49
7	e105	e85	72	68	59	64	153	41	78	156	43	48
8	e92	e77	72	68	58	59	75	39	731	115	45	48
9	e87	e69	77	67	57	56	59	38	5870	139	49	47
10	e84	e64	83	65	55	56	57	39	848	83	47	44
11	e81	e63	120	65	55	54	78	44	274	91	45	44
12	e78	e68	198	66	55	52	73	41	178	98	44	42
13	e76	e90	184	67	55	53	60	38	122	68	43	41
14	e75	e127	132	68	56	51	54	37	83	69	42	40
15	e75	e110	93	86	57	51	59	36	98	73	68	39
16	e74	e92	85	91	57	53	67	37	1720	78	83	39
17	e74	e112	80	76	56	53	57	36	1080	92	53	39
18	e73	152	76	69	55	51	51	35	289	86	46	38
19	e73	149	74	69	56	50	48	67	182	96	44	37
20	e72	368	74	72	59	50	47	121	139	81	51	37
21	e71	425	75	85	109	51	46	178	109	154	67	37
22	e71	232	76	79	164	96	45	287	108	300	76	37
23	e70	154	76	70	140	201	44	232	136	192	52	36
24	e70	104	75	67	81	222	43	177	167	162	51	37
25	e72	89	74	63	65	168	43	163	210	135	50	42
26	e70	84	72	64	62	89	40	136	320	95	47	50
27	e68	84	70	63	62	67	39	67	181	74	46	48
28	e67	85	71	62	60	61	41	51	133	64	57	47
29	e67	79	76	61	---	57	52	45	95	59	59	47
30	e66	76	74	60	---	79	59	42	118	58	79	90
31	e66	---	74	61	---	97	---	40	---	75	103	---
TOTAL	3687	3479	2670	2171	1893	2349	1881	2562	13530	4925	1707	1367
MEAN	119	116	86.1	70.0	67.6	75.8	62.7	82.6	451	159	55.1	45.6
MAX	579	425	198	91	164	222	160	287	5870	765	103	90
MIN	66	63	70	60	55	50	39	35	38	58	42	36
CFSM	2.10	2.05	1.52	1.24	1.19	1.34	1.11	1.46	7.97	2.81	.97	.81
IN.	2.42	2.29	1.75	1.43	1.24	1.54	1.24	1.68	8.89	3.24	1.12	.90

CAL YR 1988 TOTAL 55643 MEAN 152 MAX 2050 MIN 29 CFSM 2.69 IN. 36.57
WTR YR 1989 TOTAL 42221 MEAN 116 MAX 5870 MIN 35 CFSM 2.04 IN. 27.75

e Estimated

02378500 FISH RIVER NEAR SILVER HILL, AL

LOCATION.--Lat 30°32'43", long 87°47'55", on line between secs. 5 and 8, T. 6 S., R. 3 E., Baldwin County, Hydrologic Unit 03160205, near midchannel on upstream side of bridge on State Highway 104, 0.2 mi downstream from Caney Branch, 0.5 mi upstream from Perone Branch, 2.8 mi west of Silver Hill, and 12 mi upstream from mouth.

DRAINAGE AREA.--55.3 mi^2.

PERIOD OF RECORD.--July 1953 to September 1969, October 1970 to September 1971, November 1986 to current year.

REVISED RECORD.--WDR AL-87-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (from topographic map).

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--19 years (water years 1954-69, 1971, 1986-89), 108 ft^3/s, 26.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,300 ft^3/s, June 9, 1989, gage height, 19.28 ft; minimum discharge, 37 ft^3/s, June 20, 21, 1955, Sept. 11-16, 1968, Oct. 20-24, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 9	0100	*14,300	*19.28	June 15	2000	885	10.12

Minimum discharge, 58 ft^3/s, May 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	92	84	95	72	70	75	108	65	117	98	70
2	243	89	82	86	73	70	71	105	63	207	89	67
3	248	87	82	82	72	93	69	75	69	535	84	66
4	155	88	82	81	71	85	69	68	70	355	81	67
5	126	113	81	78	71	76	143	66	66	273	78	68
6	112	95	81	79	72	74	126	65	94	178	76	68
7	104	88	81	79	72	73	91	63	73	139	76	67
8	100	87	81	79	70	71	78	62	2270	115	79	65
9	98	86	83	77	69	69	74	62	5830	103	81	64
10	97	85	82	76	69	68	75	64	588	116	77	66
11	95	85	137	78	69	68	80	65	234	98	75	72
12	93	84	132	79	69	67	73	62	141	90	73	67
13	91	108	99	78	69	66	71	61	110	86	72	64
14	90	103	90	79	70	67	69	61	95	99	71	63
15	90	90	87	86	69	66	72	62	458	98	73	64
16	90	96	86	82	69	66	70	61	725	100	72	79
17	90	123	84	78	68	68	67	59	443	140	70	67
18	90	94	83	77	70	65	67	59	177	97	70	64
19	89	89	83	77	80	65	66	145	165	100	71	62
20	89	237	83	80	75	64	67	131	211	96	75	62
21	89	139	83	89	94	70	67	202	151	139	78	61
22	90	101	83	80	145	158	66	189	117	127	74	61
23	88	94	83	76	94	183	65	155	115	115	72	61
24	93	91	82	75	79	122	64	452	145	121	71	62
25	91	89	82	74	75	94	64	428	258	112	70	80
26	89	88	80	74	73	82	63	136	122	97	68	101
27	88	89	80	74	72	77	63	95	110	194	68	77
28	88	88	84	74	71	73	69	81	101	114	91	72
29	94	85	84	73	---	73	77	73	130	102	88	71
30	93	85	82	73	---	116	75	70	143	95	80	148
31	90	---	86	73	---	89	---	67	---	105	74	---
TOTAL	3350	2968	2692	2441	2122	2548	2246	3452	13339	4463	2375	2126
MEAN	108	98.9	86.8	78.7	75.8	82.2	74.9	111	445	144	76.6	70.9
MAX	248	237	137	95	145	183	143	452	5830	535	98	148
MIN	88	84	80	73	68	64	63	59	63	86	68	61
CFSM	1.95	1.79	1.57	1.42	1.37	1.49	1.35	2.01	8.04	2.60	1.39	1.28
IN.	2.25	2.00	1.81	1.64	1.43	1.71	1.51	2.32	8.97	3.00	1.60	1.43

CAL YR 1988 TOTAL 44630 MEAN 122 MAX 824 MIN 58 CFSM 2.21 IN. 30.02
WTR YR 1989 TOTAL 44122 MEAN 121 MAX 5830 MIN 59 CFSM 2.19 IN. 29.68

02378565 WEEKS BAY AT BECKWITH LODGE NEAR MAGNOLIA SPRINGS, AL

LOCATION.--Lat 30°23'18", long 87°50'32", in SE¼ sec. 38, T. 7 S., R. 2 E., Baldwin County, Hydrologic Unit 03160205, at fishing pier at Beckwith Lodge, 1.0 mi upstream of outlet into Bon Secour Bay, 2.0 mi downstream from U.S. Highway 98, and approximately 5 mi west of Magnolia Springs.

DRAINAGE AREA.--200 mi^2, approximately.

PERIOD OF RECORD.--May 1986 to current year (tidal gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 8.21 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Gage heights affected by tide.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 11.91 ft, June 8, 1989; minimum gage height, 6.61, Jan. 27, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 11.91 ft, June 8; minimum gage height, 7.01, Dec. 18.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.61	8.48	9.70	8.33	9.01	7.94	9.52	8.54	9.98	8.19	9.85	7.87
2	10.58	8.59	9.65	8.43	8.33	7.48	9.64	7.85	10.01	7.92	9.99	8.04
3	10.48	8.49	9.68	8.85	9.03	7.75	9.92	8.10	10.27	7.68	10.23	8.20
4	9.58	7.89	10.79	9.58	9.23	7.99	9.57	7.04	9.79	7.35	10.22	8.02
5	9.35	8.21	10.81	9.33	9.50	7.61	10.39	7.24	9.95	7.65	10.48	8.31
6	9.18	8.19	9.42	8.58	9.98	7.78	10.42	8.18	9.82	7.58	9.48	7.87
7	9.41	8.35	9.83	8.05	10.18	7.77	10.51	8.09	9.51	7.61	8.93	7.85
8	8.91	8.34	9.84	8.22	10.33	7.85	10.19	7.97	8.84	7.70	8.63	7.72
9	9.41	8.53	10.03	7.95	9.93	7.51	9.74	7.53	8.12	7.19	8.54	7.67
10	9.46	8.46	10.15	8.11	9.89	7.55	9.65	8.16	8.68	7.59	9.20	7.64
11	9.97	8.29	9.90	7.67	9.93	7.89	9.70	8.09	9.21	7.77	9.34	7.60
12	9.54	8.05	10.63	8.16	10.00	7.61	9.33	8.92	9.65	7.45	9.87	7.90
13	9.52	7.92	10.68	8.17	9.55	7.41	8.94	8.14	9.95	7.74	10.10	8.04
14	9.91	7.88	10.09	7.99	9.60	7.45	10.01	8.25	9.69	7.91	10.48	8.05
15	10.22	8.09	10.22	8.02	9.28	8.24	9.65	8.45	9.74	7.62	10.34	8.51
16	10.32	8.21	10.58	8.83	8.70	7.47	9.23	7.53	9.61	7.48	10.18	8.47
17	10.31	8.26	9.33	8.22	8.72	7.88	9.80	7.20	9.54	7.36	9.73	8.19
18	10.29	8.33	9.55	8.96	9.24	7.01	9.83	7.33	9.58	7.81	9.65	8.28
19	10.18	8.23	10.32	9.15	9.66	7.45	9.99	7.42	9.67	7.84	9.52	8.05
20	9.95	8.68	10.26	8.86	10.14	8.01	9.30	7.48	10.23	8.49	9.72	8.46
21	10.19	8.73	9.88	7.71	10.17	7.82	9.59	7.15	10.14	8.90	9.46	7.99
22	9.75	8.81	10.04	7.67	10.10	7.59	9.35	7.75	9.30	7.92	9.35	8.01
23	10.06	8.92	9.89	7.92	10.07	7.86	9.20	7.61	7.74	7.10	9.59	8.42
24	9.97	8.30	9.88	7.26	10.01	7.85	9.19	7.70	7.66	7.13	9.14	8.07
25	10.38	8.17	10.37	7.59	9.83	7.38	9.14	8.18	8.58	7.20	9.32	7.98
26	10.43	8.13	10.81	8.87	9.32	7.81	9.03	8.41	8.91	7.57	9.57	7.9[illegible]
27	10.45	8.26	10.80	8.38	9.90	8.39	8.97	8.47	9.82	7.78	9.51	7.94
28	10.39	8.12	10.04	7.69	9.95	7.68	9.41	8.32	9.73	8.37	9.79	7.86
29	10.37	8.07	9.31	7.96	8.94	8.16	9.22	8.51	---	---	10.21	8.17
30	9.95	8.06	9.60	8.12	9.18	8.44	9.83	8.35	---	---	10.15	8.68
31	9.79	8.28	---	---	9.61	8.67	10.00	7.88	---	---	9.35	8.56
MONTH	10.61	7.88	10.81	7.26	10.33	7.01	10.51	7.04	10.27	7.10	10.48	7.60

02378565 WEEKS BAY AT BECKWITH LODGE NEAR MAGNOLIA SPRINGS, AL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MA	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.62	7.26	9.53	8.54	10.10	8.11	10.87	8.46	10.57	8.52	9.77	9.46
2	9.40	7.80	9.32	8.70	10.28	7.83	11.22	8.34	10.03	8.46	9.61	9.19
3	9.76	8.29	9.22	8.13	10.40	7.97	10.98	8.31	9.58	8.73	9.74	8.80
4	9.76	8.80	9.98	7.96	10.45	8.12	10.75	8.41	9.43	8.90	10.03	9.07
5	9.71	8.24	10.77	8.16	10.90	8.15	10.29	8.38	9.21	8.82	10.29	9.00
6	9.41	8.33	10.00	7.64	10.50	8.16	10.00	8.77	9.52	8.88	10.32	8.88
7	9.47	7.64	9.83	7.48	10.38	8.30	9.80	8.84	9.66	8.78	10.18	8.69
8	10.27	7.78	10.08	7.43	11.91	8.65	9.59	8.90	9.63	8.73	10.24	8.59
9	10.24	7.60	10.32	8.22	10.36	8.95	9.48	9.06	9.67	8.55	10.34	8.39
10	9.38	7.46	9.42	7.99	9.63	8.88	9.65	9.01	9.89	8.37	10.32	8.65
11	9.57	7.19	9.49	7.88	9.53	8.93	9.85	8.76	9.87	8.39	10.21	8.33
12	9.84	7.43	9.39	7.64	9.73	8.96	9.90	8.73	10.08	8.14	10.37	8.64
13	9.62	7.88	9.34	8.37	10.08	8.80	10.09	8.39	10.17	8.35	10.30	8.77
14	9.69	7.95	9.19	8.37	10.12	9.00	10.50	8.64	10.41	8.24	10.23	9.15
15	9.46	8.69	9.23	8.54	11.52	8.67	10.35	8.17	10.43	8.43	9.94	9.03
16	9.21	8.47	9.26	8.29	10.15	8.07	10.33	8.23	10.28	8.46	9.79	8.74
17	9.02	8.66	9.37	8.35	10.32	8.07	10.14	8.00	10.08	8.16	10.18	8.27
18	9.14	8.60	9.61	8.06	10.35	8.18	10.44	7.99	9.82	8.30	10.09	8.30
19	9.29	8.41	9.92	8.22	11.01	8.25	10.47	8.45	9.57	8.67	10.08	8.40
20	9.41	8.22	10.08	7.82	10.71	8.39	10.47	8.41	9.71	8.77	10.14	8.17
21	9.69	8.39	10.10	7.77	10.65	8.31	10.11	8.63	10.26	8.90	10.27	8.22
22	9.79	8.08	10.24	7.95	10.72	8.31	9.85	8.74	10.52	8.78	10.25	8.24
23	9.87	8.05	10.37	8.15	10.29	8.68	9.45	8.98	10.47	8.34	9.83	7.87
24	9.92	8.05	10.25	8.10	10.09	8.77	9.89	8.85	10.34	8.21	9.52	8.16
25	9.90	8.05	10.10	8.18	9.62	8.98	9.88	8.82	10.42	8.14	10.41	8.92
26	9.81	8.06	9.82	8.34	9.65	9.27	10.21	8.52	10.39	8.32	10.17	8.58
27	9.82	8.02	9.40	8.16	10.14	8.95	10.38	8.27	10.40	8.29	9.73	8.93
28	10.11	8.16	8.88	7.93	10.53	8.72	10.50	8.19	10.24	8.46	9.71	9.05
29	9.73	8.31	9.08	8.04	10.57	8.31	10.51	8.16	10.36	8.74	10.00	9.15
30	9.70	8.37	9.28	8.54	10.89	8.20	10.59	8.34	10.22	8.94	10.16	9.25
31	---	---	9.83	8.16	---	---	10.38	8.32	10.00	9.29	---	---
MONTH	10.27	7.19	10.77	7.43	11.91	7.83	11.22	7.99	10.57	8.14	10.41	7.87
YEAR	11.91	7.01										

02398300 CHATTOOGA RIVER ABOVE GAYLESVILLE, AL

LOCATION.--Lat 34°17'25", long 85°30'33", in NW¼ sec. 5, T. 9 S., R. 11 E., Cherokee County, Hydrologic Unit 03150105, on left bank 10 ft upstream from bridge on county road, 600 ft downstream from Mills Creek, 3.5 mi northeast of Gaylesville, and 20.1 mi upstream from mouth.

DRAINAGE AREA.--366 mi².

PERIOD OF RECORD.--January 1959 to September 1967, October 1967 to September 1971 (annual peak discharge only), October 1971 to September 1984 (flood hydrograph only), October 1984 to current year.

REVISED RECORDS.--WSP 1906: Location. WDR AL-83-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 562.11 ft above National Geodetic Vertical Datum of 1929 (Alabama Power Company bench mark). December 4, 1958, to July 20, 1959, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 2, 3, 4. Records good except those for period of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--13 years (water years 1960-67, 1985-89), 588 ft³/s, 21.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft³/s, Jan. 4, 1982, gage height, 22.23 ft; minimum discharge, 78 ft³/s, Aug. 4, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 30, 1951, reached a gage height of 23.5 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 28	2030	*6,230	*16.65	June 21	1245	5,550	15.70
June 17	0345	5,730	15.97				

Minimum discharge, 124 ft³/s, Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	140	398	1520	410	5960	715	372	228	665	1570	398
2	e240	140	360	982	389	3080	650	379	248	635	671	502
3	e200	139	324	1310	373	1670	630	337	304	1300	534	500
4	e175	152	306	1160	359	1800	1480	321	245	3450	469	351
5	158	265	283	848	562	4640	3800	660	254	4580	427	310
6	148	257	268	832	1350	4310	2290	1030	413	2750	398	281
7	143	205	259	834	1700	2900	1960	576	478	2190	371	274
8	142	179	249	865	1350	1840	2360	470	355	1470	346	266
9	139	161	237	1020	996	1410	2530	479	501	1120	330	254
10	138	156	226	1630	842	1160	1710	529	557	911	317	246
11	135	156	221	2980	755	996	1320	452	421	785	303	272
12	131	154	209	4540	681	885	1090	404	361	708	296	274
13	128	183	204	4680	618	790	939	377	529	689	285	244
14	126	194	195	3740	574	725	833	360	527	639	277	236
15	129	190	189	2170	531	672	918	350	2310	559	282	226
16	127	197	185	1560	487	653	874	330	4610	540	290	255
17	128	264	175	1190	458	611	730	313	5360	520	275	329
18	128	237	170	987	468	566	663	296	2170	463	276	246
19	142	229	169	862	589	529	621	287	2130	711	259	232
20	156	1800	167	764	653	519	582	321	3200	1030	252	225
21	148	1410	164	671	2450	843	543	387	5150	738	241	216
22	146	706	164	610	2540	780	511	323	3920	846	237	215
23	142	526	174	567	1390	1340	484	314	2570	1520	242	236
24	141	419	199	529	1040	1730	454	289	1650	1270	253	284
25	134	352	204	487	872	1230	430	276	1400	923	295	251
26	134	311	184	463	794	1000	412	263	1040	726	533	494
27	137	451	176	468	1240	868	391	268	855	617	823	514
28	140	644	183	431	5440	772	375	279	756	547	373	361
29	145	506	185	404	---	704	362	252	830	494	306	1920
30	141	445	228	449	---	683	351	241	725	457	275	3880
31	139	---	813	451	---	751	---	231	---	445	765	---
TOTAL	4519	11168	7468	40004	29911	46417	31008	11766	44097	34298	12571	14292
MEAN	146	372	241	1290	1068	1497	1034	380	1470	1106	406	476
MAX	240	1800	813	4680	5440	5960	3800	1030	5360	4580	1570	3880
MIN	126	139	164	404	359	519	351	231	228	445	237	215
CFSM	.40	1.02	.66	3.53	2.92	4.09	2.82	1.04	4.02	3.02	1.11	1.30
IN.	.46	1.14	.76	4.07	3.04	4.72	3.15	1.20	4.48	3.49	1.28	1.45

CAL YR 1988 TOTAL 110309 MEAN 301 MAX 6240 MIN 82 CFSM .82 IN. 11.21
WTR YR 1989 TOTAL 287519 MEAN 788 MAX 5960 MIN 126 CFSM 2.15 IN. 29.22

e Estimated

02399200 LITTLE RIVER NEAR BLUE POND, AL

LOCATION.--Lat 34°17'16", long 85°35'51", in NW¼ sec. 3, T. 9 S., R. 9 E., Cherokee County, Hydrologic Unit 03150105, on right bank at Canyon Mouth Park, 0.9 mi upstream from State Highway 176, 2.5 mi upstream from Wolf Creek, 4.2 mi northeast of Blue Pond, and 7.5 miles upstream from mouth.

DRAINAGE AREA.--199 mi^2.

PERIOD OF RECORD.--December 1958 to September 1967, October 1967 to September 1970 (flood hydrograph and low-flow partial-record station), October 1970 to current year.

REVISED RECORD.--WDR AL-83-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 589.34 ft above National Geodetic Vertical Datum of 1929. Dec. 1, 1958, to Aug. 1, 1959, nonrecording gage on highway bridge 0.9 mi downstream, and Aug. 2, 1959, to May 27, 1981, recording gage 0.7 mile downstream at datum 7.96 ft lower.

REMARKS.--Estimated daily discharges: June 21, July 4-16, July 20 to Aug. 7. Records good except those for period of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--27 years (water years 1960-67, 1971-89), 489 ft^3/s, 33.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,800 ft^3/s, July 24, 1985, gage height, 16.98 ft from rating curve extended above 23,000 ft^3/s on basis of computation of peak discharge at contracted opening and flow over the road; minimum, 0.2 ft^3/s, July 20, 21, 22, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 13	0715	6,310	7.46	Apr. 4	2245	6,870	7.74
Feb. 28	0700	10,600	9.13	June 15	2230	*10,700	*9.16
Mar. 06	0215	6,290	7.45	Sept. 30	1945	8,130	8.26

Minimum discharge, 16 ft^3/s, Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	33	511	2710	235	2930	493	100	53	251	390	85
2	151	34	409	1580	221	1770	426	114	82	279	160	95
3	138	31	344	1860	209	1170	387	99	83	2350	120	105
4	115	55	301	1790	199	1220	2190	82	77	3000	100	80
5	96	366	258	1140	421	3510	3790	182	93	1500	90	57
6	82	364	230	1140	1690	4420	1830	724	317	800	80	46
7	73	262	209	1020	2130	2160	1760	404	386	450	72	41
8	65	205	191	1290	1440	1380	2010	290	261	340	64	37
9	60	185	174	1560	946	974	2060	264	394	300	52	32
10	57	176	160	2330	725	758	1360	390	442	260	44	28
11	51	168	150	3930	599	622	985	317	303	240	37	26
12	31	157	138	4350	498	521	778	248	213	240	32	24
13	24	233	129	5490	422	438	646	201	310	230	27	28
14	21	264	122	2990	368	372	538	169	557	310	32	105
15	19	239	114	2080	319	329	620	154	5500	170	56	54
16	18	232	106	1460	283	333	608	134	6170	270	45	53
17	17	297	97	1050	258	295	505	111	2660	170	54	44
18	17	286	90	827	273	262	433	91	1550	136	64	38
19	19	263	86	676	406	236	372	78	1070	248	46	32
20	32	2380	83	567	496	244	320	90	1340	300	39	28
21	37	2020	81	461	2620	536	275	260	3000	160	30	24
22	38	1100	82	394	2100	561	244	178	2360	120	22	25
23	35	756	111	346	1240	899	209	144	1780	110	32	38
24	31	572	159	309	858	1310	171	127	1160	110	33	34
25	25	447	167	273	684	943	152	101	798	100	42	49
26	22	373	148	247	587	727	137	81	585	94	65	124
27	20	829	139	266	1120	594	124	73	426	90	74	116
28	21	1010	154	239	7420	496	113	146	346	82	78	115
29	23	796	196	215	---	428	100	106	402	78	63	1360
30	27	636	236	235	---	614	92	78	301	82	75	6250
31	28	---	1400	260	---	586	---	63	---	82	133	---
TOTAL	1479	14769	6775	43085	28767	31638	23728	5599	33019	12952	2251	9173
MEAN	47.7	492	219	1390	1027	1021	791	181	1101	418	72.6	306
MAX	151	2380	1400	5490	7420	4420	3790	724	6170	3000	390	6250
MIN	17	31	81	215	199	236	92	63	53	78	22	24
CFSM	.24	2.47	1.10	6.98	5.16	5.13	3.97	.91	5.53	2.10	.36	1.54
IN.	.28	2.76	1.27	8.05	5.38	5.91	4.44	1.05	6.17	2.42	.42	1.71

CAL YR 1988 TOTAL 107111.9 MEAN 293 MAX 11300 MIN 1.5 CFSM 1.47 IN. 20.02
WTR YR 1989 TOTAL 213235 MEAN 584 MAX 7420 MIN 17 CFSM 2.94 IN. 39.86

02400100 TERRAPIN CREEK AT ELLISVILLE, AL

LOCATION.--Lat 34°03'54", long 85°36'51", in SW¼ sec. 20, T. 11 S., R. 10 E., Cherokee County, Hydrologic Unit 03150105, on right bank 40 ft downstream from bridge on State Highway 9, 0.2 mi southwest of Ellisville, and 6.7 miles upstream from mouth.

DRAINAGE AREA.--252 mi^2.

PERIOD OF RECORD.--October 1962 to September 1967, October 1967 to September 1972 (annual peak discharge only), October 1972 to September 1979 (flood hydrograph only), October 1980 to current year.

REVISED RECORD.--WDR AL-83-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 539.07 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--14 years (water years 1963-67, 1981-89), 369 ft^3/s, 19.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,100 ft^3/s, Mar. 4, 1979, gage height, 19.82 ft; minimum discharge, 53 ft^3/s, Aug. 3, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 6	0800	5,030	13.99	June 21	1900	*5,720	*14.59

Minimum discharge, 58 ft^3/s, Oct. 13-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	77	150	783	205	1900	342	280	130	571	277	220
2	83	75	133	538	180	1370	307	550	117	417	237	181
3	99	77	121	778	186	868	292	353	117	680	248	170
4	96	77	116	1200	181	1020	702	269	122	896	210	161
5	82	108	112	600	199	3430	2790	552	133	1330	193	149
6	75	149	107	396	308	3970	1850	680	176	1500	181	144
7	69	106	103	325	636	2430	1370	438	187	2030	170	140
8	65	75	97	285	619	2060	1040	333	163	1790	159	135
9	65	71	94	279	452	1800	993	306	161	1500	152	142
10	63	71	91	464	376	1570	710	658	161	912	150	147
11	63	70	87	857	330	1190	473	519	152	483	144	139
12	61	66	83	1080	284	836	393	363	143	402	142	138
13	58	86	82	2020	274	574	348	298	234	392	135	141
14	58	95	81	1510	255	374	315	270	197	357	141	139
15	58	103	80	1130	237	324	372	260	541	307	146	143
16	59	109	80	721	216	292	339	245	1670	536	153	149
17	59	181	80	535	199	267	292	221	1530	1090	343	156
18	60	186	79	446	252	251	271	202	755	627	346	150
19	63	117	78	390	305	232	256	189	2300	528	226	142
20	62	539	79	351	349	228	240	185	2670	498	188	138
21	67	434	78	313	1090	689	227	201	4930	444	172	138
22	73	231	79	283	1210	791	217	195	3010	619	160	142
23	73	164	85	262	727	1100	206	177	2380	1110	155	144
24	72	133	91	246	469	1420	197	195	1870	633	165	144
25	65	112	91	229	373	989	187	171	1570	474	296	176
26	62	103	88	213	332	626	208	156	1300	358	230	277
27	65	228	85	208	553	465	201	147	762	300	217	245
28	64	256	84	199	2580	381	192	142	431	268	190	234
29	65	208	85	188	---	337	184	134	651	244	166	323
30	66	172	107	208	---	559	178	120	588	236	165	388
31	73	---	221	229	---	416	---	123	---	235	322	---
TOTAL	2104	4479	3027	17266	13377	32759	15692	8932	29151	21767	6179	5235
MEAN	67.9	149	97.6	557	478	1057	523	288	972	702	199	174
MAX	99	539	221	2020	2580	3970	2790	680	4930	2030	346	388
MIN	58	66	78	188	180	228	178	120	117	235	135	135
CFSM	.27	.59	.39	2.21	1.90	4.19	2.08	1.14	3.86	2.79	.79	.69
IN.	.31	.66	.45	2.55	1.97	4.84	2.32	1.32	4.30	3.21	.91	.77

CAL YR 1988 TOTAL 63033 MEAN 172 MAX 2600 MIN 56 CFSM .68 IN. 9.30
WTR YR 1989 TOTAL 159968 MEAN 438 MAX 4930 MIN 58 CFSM 1.74 IN. 23.61

MOBILE RIVER MAIN STEM

02400500 COOSA RIVER AT GADSDEN, AL

LOCATION.--Lat 34°00'37", long 85°59'52", in NE¼ sec. 10, T. 12 S., R. 6 E., Etowah County, Hydrologic Unit 03150106, near midstream in pier of Etowah County Memorial Bridge on Forrest Avenue in Gadsden, 450 ft downstream from Louisville & Nashville Railroad bridge, 1.5 mi upstream from Big Wills Creek, and at mile 174.8.

DRAINAGE AREA.--5,805 mi^2.

PERIOD OF RECORD.--October 1926 to September 1976. October 1976 to current year (flood hydrograph only). Gage-height records collected at same site since 1890 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1906: 1944, 1947-49, 1951-52, 1954, 1958. WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 485.97 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1926, nonrecording gage on Louisville & Nashville Railroad bridge 450 ft upstream at datum 1.15 ft higher. Oct. 1, 1926, to Mar. 31, 1932, water-stage recorder, and Apr. 1, 1932, to May 23, 1935, nonrecording gage, at present site and datum. Since May 4, 1965, auxiliary water-stage recorder 2.2 mi upstream from base gage at present datum.

REMARKS.--No estimated daily gage heights. Record good. A flood hydrograph for selected peaks occurring during the 1989 water year is published under DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES in this report.

AVERAGE DISCHARGE.--50 years, (water years 1927-76) 9,468 ft^3/s, 22.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,900 ft^3/s, Apr. 11, 1936, gage height, 31.13 ft; minimum daily, 100 ft^3/s, many days in water year 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1886, reached a stage of 37.9 ft, from floodmarks established by U.S. Army Corps of Engineers, discharge, 115,000 ft^3/s, from rating curve extended above 80,000 ft^3/s. Flood of July 15, 1916, reached a stage of 32.7 ft, discharge, 85,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 24.06 ft, June 21; minimum, 17.81 ft, Mar. 21.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.61	21.00	19.28	18.82	18.54	21.42	18.90	21.67	21.70	21.86	21.88	21.64
2	21.15	20.52	18.98	19.03	18.74	21.70	18.91	21.60	21.55	21.91	21.89	21.72
3	20.99	19.56	19.05	19.06	18.72	21.39	18.77	21.66	21.68	22.17	21.53	21.80
4	21.11	19.09	19.05	19.31	18.73	21.40	19.24	21.64	21.77	22.69	21.31	21.80
5	21.22	18.63	19.18	18.79	19.10	22.43	20.10	21.78	21.86	22.99	21.31	21.75
6	21.25	18.63	19.17	18.69	18.65	23.61	21.24	22.10	21.83	23.34	21.39	21.71
7	21.25	18.66	18.92	18.78	19.08	23.80	21.43	22.03	21.77	23.58	21.53	21.65
8	21.33	18.71	18.73	18.90	19.51	23.46	21.14	21.88	21.63	23.64	21.47	21.59
9	21.39	18.78	18.63	19.05	19.33	23.05	21.23	21.92	21.51	23.34	21.57	21.73
10	21.40	18.70	18.58	19.26	18.99	22.69	21.28	21.86	21.49	22.36	21.70	21.76
11	21.41	18.52	18.58	19.49	18.92	21.99	20.74	21.80	21.57	21.91	21.76	21.73
12	21.43	18.66	18.52	21.28	18.85	21.34	19.47	21.74	21.58	21.85	21.85	21.70
13	21.45	18.89	18.54	21.51	18.84	20.95	19.22	21.76	21.58	21.81	21.92	21.67
14	21.44	19.06	18.59	21.71	18.98	20.28	19.04	21.86	21.74	21.67	21.86	21.66
15	21.52	18.85	18.55	21.55	18.77	18.96	19.31	21.88	22.12	21.39	21.77	21.73
16	21.56	18.71	18.35	21.13	18.63	18.71	19.56	21.84	22.64	21.68	21.64	21.85
17	21.56	18.82	18.64	21.14	18.56	18.75	19.75	21.81	22.52	22.32	21.52	21.91
18	21.55	18.67	18.79	20.95	18.59	18.80	19.69	21.75	22.95	21.86	21.46	21.82
19	21.57	18.49	18.72	20.59	18.83	18.91	19.78	21.60	23.19	21.73	21.53	21.76
20	21.57	18.83	18.74	18.90	18.80	18.86	19.92	21.66	23.50	21.80	21.65	21.68
21	21.47	18.67	18.75	18.31	19.07	18.22	20.06	21.80	23.79	21.57	21.70	21.61
22	21.50	19.20	18.79	18.49	19.14	18.78	20.33	21.82	23.56	21.68	21.65	21.49
23	21.55	19.29	18.94	18.60	19.67	19.27	20.73	21.80	23.66	21.77	21.61	21.54
24	21.47	18.86	19.17	18.71	19.83	19.45	20.85	21.83	23.42	21.93	21.57	21.64
25	21.37	18.47	19.36	18.84	19.14	19.01	20.99	21.89	23.56	22.06	21.56	21.63
26	21.36	18.52	19.24	18.82	19.06	18.96	21.06	21.74	23.43	21.81	21.70	21.66
27	21.42	18.67	19.24	18.77	19.03	19.01	21.18	21.77	23.21	21.61	21.75	21.56
28	21.49	18.99	18.95	18.75	21.41	18.93	21.36	21.86	22.01	21.61	21.50	21.42
29	21.62	18.58	18.59	18.88	---	19.06	21.64	21.86	21.35	21.66	21.54	21.26
30	21.66	18.85	18.40	18.69	---	18.98	21.76	21.83	21.68	21.79	21.57	21.97
31	21.54	---	18.55	18.38	---	19.33	---	21.80	---	21.85	21.57	---
MEAN	21.43	18.93	18.82	19.46	19.05	20.37	20.29	21.80	22.33	22.10	21.62	21.68
MAX	21.66	21.00	19.36	21.71	21.41	23.80	21.76	22.10	23.79	23.64	21.92	21.97
MIN	20.99	18.47	18.35	18.31	18.54	18.22	18.77	21.60	21.35	21.39	21.31	21.26

CAL YR 1988 MEAN 19.98 MAX 22.37 MIN 18.34
WTR YR 1989 MEAN 20.67 MAX 23.80 MIN 18.22

02401000 BIG WILLS CREEK NEAR REECE CITY, AL

LOCATION.--Lat 34°05'53", long 86°02'17", in SE¼ sec. 6, T. 11 S., R. 6 E., Etowah County, Hydrologic Unit 03150105, near right bank on upstream side of bridge on county road, 1 mi upstream from Fisher Creek, 1.8 mi northwest of Reece City, and at mile 25.0.

DRAINAGE AREA.--182 mi^2.

PERIOD OF RECORD.--October 1943 to September 1970, October 1970 to September 1975 (flood hydrograph only), October 1986 to current year. Prior to October 1986 published as Big Wills Creek near Crudup.

REVISED RECORD.--WSP 1384: Drainage area. WDR AL-87-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 570 ft, by barometer. Prior to July 10, 1957, nonrecording gage at site 100 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--30 years (water years 1944-70, 1987-89), 298 ft^3/s, 22.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft^3/s, Mar. 29, 1951, gage height, 14.5 ft from floodmarks. Minimum discharge, observed, 21 ft^3/s, Sept. 22, 1955, Dec. 5, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1884 reached a stage of 16.3 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 1	0130	*3,780	*10.14				

Minimum discharge, 49 ft^3/s, Oct. 25-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	53	214	1050	220	3400	372	191	111	385	840	134
2	99	53	188	630	207	1630	332	186	106	384	398	148
3	97	52	170	458	198	853	312	172	102	979	288	150
4	84	94	157	600	192	784	549	165	105	1530	261	124
5	75	250	147	427	265	1820	1770	198	112	1800	225	113
6	72	231	135	374	848	2590	1880	359	169	933	203	109
7	69	136	124	391	963	2380	860	253	178	732	188	107
8	65	110	116	394	787	1110	903	199	148	607	175	106
9	63	99	109	606	572	750	1090	194	156	513	166	104
10	65	91	103	812	479	621	784	219	158	445	157	101
11	60	87	98	1300	425	551	630	229	140	409	149	101
12	59	82	91	2260	382	502	541	187	125	411	142	105
13	57	92	87	2470	347	456	479	174	145	377	136	99
14	55	100	84	2490	318	416	430	166	179	333	131	96
15	55	95	81	1430	293	380	459	162	593	301	128	99
16	54	91	78	861	273	358	463	155	1430	468	133	99
17	56	104	76	650	258	323	380	149	1710	471	131	96
18	52	97	73	548	250	295	342	144	608	324	135	92
19	54	93	69	477	285	273	316	140	496	301	132	90
20	58	490	68	420	298	263	294	143	449	527	121	88
21	61	797	67	372	818	482	276	180	915	389	116	88
22	55	342	67	334	1160	506	260	174	1060	309	111	96
23	52	258	78	306	604	492	247	157	1340	282	210	216
24	53	217	117	284	491	735	235	150	673	278	139	167
25	49	187	127	264	422	572	226	140	514	274	133	125
26	49	169	101	247	384	501	216	129	430	238	217	152
27	49	347	89	251	598	443	207	126	378	222	145	161
28	49	381	91	233	2580	396	198	137	368	207	141	133
29	50	296	101	214	---	363	193	141	466	195	122	424
30	53	245	121	230	---	498	188	123	396	208	119	1110
31	55	---	433	244	---	458	---	116	---	202	128	---
TOTAL	1903	5739	3660	21627	14917	25201	15432	5358	13760	15034	5820	4833
MEAN	61.4	191	118	698	533	813	514	173	459	485	188	161
MAX	99	797	433	2490	2580	3400	1880	359	1710	1800	840	1110
MIN	49	52	67	214	192	263	188	116	102	195	111	88
CFSM	.34	1.05	.65	3.83	2.93	4.47	2.83	.95	2.52	2.66	1.03	.89
IN.	.39	1.17	.75	4.42	3.05	5.15	3.15	1.10	2.81	3.07	1.19	.99

CAL YR 1988 TOTAL 47727 MEAN 130 MAX 1630 MIN 28 CFSM .72 IN. 9.76
WTR YR 1989 TOTAL 133284 MEAN 365 MAX 3400 MIN 49 CFSM 2.01 IN. 27.24

02401370 BIG CANOE CREEK NEAR SPRINGVILLE, AL

LOCATION.--Lat 33°48'49", long 86°22'54", in NE¼ sec. 13, T. 14 S., R. 2 E., St. Clair County, Hydrologic Unit 03150106, on downstream side of bridge on U.S. Highway 11, 1 mi west of Caldwell, 4 mi northwest of Springville, and 37.0 mi upstream from mouth.

DRAINAGE AREA.--45.0 mi^2.

PERIOD OF RECORD.--October 1978 to curent year.

GAGE.--Water-stage recorder. Datum of gage is 587.42 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--11 years, 82.5 ft^3/s, 24.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft^3/s, Dec. 1, 1982, gage height, 12.79 ft. Minimum daily discharge, 4.5 ft^3/s, Aug. 27-29, Sept. 5, 6, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 28	0800	*2,340	*10.32				

Minimum daily discharge, 11 ft^3/s, Sept. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	22	126	338	60	418	175	53	17	115	21	14
2	143	23	103	226	56	269	144	42	17	670	21	16
3	93	22	89	360	53	205	127	34	18	635	21	15
4	68	35	80	343	52	413	683	33	23	346	20	13
5	52	282	69	229	58	742	896	159	35	246	18	12
6	43	120	61	185	126	373	343	175	57	190	19	11
7	38	79	55	146	196	257	249	94	39	151	32	11
8	33	65	50	138	179	198	199	72	42	122	22	12
9	30	59	45	160	139	164	188	65	88	122	18	12
10	28	52	41	333	118	141	154	82	46	113	17	16
11	26	49	39	847	105	124	133	57	34	90	16	15
12	23	43	35	737	93	110	118	49	38	76	15	13
13	21	53	33	1010	84	98	105	44	60	66	15	13
14	20	49	32	476	75	90	94	43	72	61	14	15
15	19	46	30	428	66	81	113	45	571	52	15	19
16	19	49	27	299	59	73	96	39	388	47	15	18
17	18	75	26	227	54	64	84	35	188	46	15	15
18	18	62	25	185	53	60	77	32	127	40	14	13
19	18	57	24	156	57	55	70	31	632	39	13	13
20	18	656	24	134	61	53	65	31	323	50	13	12
21	21	292	23	115	208	376	59	31	704	38	13	13
22	23	184	23	102	181	251	54	28	543	35	13	21
23	21	137	43	92	136	299	50	28	317	33	12	28
24	19	109	59	84	111	277	46	26	213	31	12	19
25	20	91	66	74	98	202	43	24	155	30	14	21
26	19	85	54	66	91	163	40	22	119	27	14	30
27	19	271	49	62	189	136	38	21	96	25	13	24
28	19	306	57	56	1460	117	36	20	83	24	12	20
29	20	205	59	52	---	117	34	19	87	24	12	22
30	21	158	65	73	---	460	33	18	107	30	20	111
31	21	---	179	71	---	244	---	17	---	22	14	---
TOTAL	984	3736	1691	7804	4218	6630	4546	1469	5239	3596	503	587
MEAN	31.7	125	54.5	252	151	214	152	47.4	175	116	16.2	19.6
MAX	143	656	179	1010	1460	742	896	175	704	670	32	111
MIN	18	22	23	52	52	53	33	17	17	22	12	11
CFSM	.71	2.77	1.21	5.59	3.35	4.75	3.37	1.05	3.88	2.58	.36	.43
IN.	.81	3.09	1.40	6.45	3.49	5.48	3.76	1.21	4.33	2.97	.42	.49

CAL YR 1988 TOTAL 20344.0 MEAN 55.6 MAX 978 MIN 6.5 CFSM 1.24 IN. 16.82
WTR YR 1989 TOTAL 41003 MEAN 112 MAX 1460 MIN 11 CFSM 2.50 IN. 33.90

02401390 BIG CANOE CREEK AT ASHVILLE, AL

LOCATION.--Lat 33°50'23", long 86°15'46", in SW¼SE¼ sec. 6, T. 14 S., R. 4 E., St. Clair County, Hydrologic Unit 03150106, on downstream side of bridge on U.S. Highway 231, 0.5 mi west-northwest of Ashville, 1.7 mi downstream from Muckleroy Creek, and 22.3 mi upstream from mouth.

DRAINAGE AREA.--141 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WDR AL-76-1: 1971-75 (P). WDR AL-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 529.56 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 21 to Nov. 7. Records good except those for periods of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

DISCHARGE.--24 years, 269 ft^3/s, 25.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft^3/s, Apr. 13, 1979, gage height, 18.75 ft; minimum, 10 ft^3/s, Sept. 22, 1981, Oct. 2, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 13	1700	3,910	14.04	Apr. 5	1400	3,880	14.02
Feb. 28	1700	4,260	14.31	July 3	1300	3,900	14.03
Mar. 5	1800	*4,550	*14.53				

Minimum discharge, 28 ft^3/s, Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	48	298	1040	176	2740	454	335	44	267	64	44
2	432	51	245	582	159	750	368	219	44	924	59	65
3	316	48	212	811	149	528	315	122	43	3410	60	52
4	197	100	187	1080	147	643	795	100	46	1450	61	42
5	137	560	164	543	208	4160	3620	270	59	710	55	36
6	108	250	147	442	424	3050	1660	635	86	524	51	33
7	90	160	135	366	718	853	665	248	105	400	78	32
8	79	127	126	338	490	571	486	182	71	320	75	32
9	72	118	117	410	359	440	487	157	142	307	55	31
10	67	105	108	905	296	368	380	265	116	265	49	37
11	61	97	100	1280	264	319	320	165	80	208	47	77
12	55	86	94	2800	238	280	280	129	71	184	45	41
13	51	118	88	3570	215	251	251	113	95	183	42	37
14	48	128	84	2430	200	230	227	108	124	172	41	36
15	45	104	81	1140	182	210	276	118	638	146	41	38
16	43	101	76	800	167	194	265	108	1240	132	41	44
17	41	146	72	572	154	175	211	92	419	133	41	39
18	40	136	69	451	149	164	187	84	256	119	42	33
19	39	122	66	381	179	153	174	80	718	121	39	31
20	39	1650	64	328	229	143	165	79	971	163	37	29
21	50	1710	67	279	689	984	152	85	1870	131	37	28
22	60	444	74	246	495	897	140	79	2500	110	35	30
23	45	326	136	224	335	869	130	79	1270	135	34	54
24	42	261	208	206	270	867	121	74	554	103	34	47
25	44	218	203	188	236	551	112	66	373	100	34	41
26	42	189	139	172	220	424	105	63	280	89	41	100
27	41	756	120	168	419	351	98	57	225	77	37	69
28	42	808	125	154	3490	296	92	53	190	70	38	49
29	44	482	147	145	---	275	87	50	181	71	34	59
30	46	365	154	240	---	1570	83	47	165	68	36	289
31	46	---	571	247	---	782	---	46	---	73	67	---
TOTAL	2547	9814	4477	22538	11257	24088	12706	4308	12976	11165	1450	1575
MEAN	82.2	327	144	727	402	777	424	139	433	360	46.8	52.5
MAX	432	1710	571	3570	3490	4160	3620	635	2500	3410	78	289
MIN	39	48	64	145	147	143	83	46	43	68	34	28
CFSM	.58	2.32	1.02	5.16	2.85	5.51	3.00	.99	3.07	2.55	.33	.37
IN.	.67	2.59	1.18	5.95	2.97	6.36	3.35	1.14	3.42	2.95	.38	.42

CAL YR 1988 TOTAL 63603 MEAN 174 MAX 4260 MIN 14 CFSM 1.23 IN. 16.78
WTR YR 1989 TOTAL 118901 MEAN 326 MAX 4160 MIN 28 CFSM 2.31 IN. 31.37

02401470 LITTLE CANOE CREEK NEAR STEELE, AL

LOCATION.--Lat 33°58'09", long 86°10'40", in SW¼ sec. 24, T. 12 S., R. 4 E., St. Clair County, Hydrologic Unit 03150105, near right bank on downstream side of bridge on U.S. Highway 11, 2.3 mi north of Steele, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--22.3 mi^2.

PERIOD OF RECORD.--April 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 554.62 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 12, 13, Oct. 31 to Nov. 1, 3, 9, 10, Dec. 6-19, Jan. 14, 15, Mar. 13-16, Apr. 18-20, May 21-28, and Aug. 11-13. Records good except for periods of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--7 years, 31.7 ft^3/s, 19.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 2,090 ft^3/s, May 18, 1983, gage height, 8.19 ft; minimum, 0.97 ft^3/s, Dec. 17, 18, 19, 20, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since 1970, 2,580 ft^3/s, Apr. 13, 1979, gage height, 8.36 ft (from flood mark). The flood of Mar. 19, 1970, reached a stage of 8.23 ft (from flood mark), 2,350 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 28	0715	*1,190	*6.85	July 3	0400	1,130	6.79

Minimum daily discharge, 5.1 ft^3/s, Oct. 25, 26.

CORRECTION.--The daily discharge for May 15, 1982 is 13 ft^3/s. The figure previously published is incorrect.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	6.0	47	119	29	248	62	27	8.0	24	15	7.8
2	31	6.6	39	83	28	148	51	31	8.0	50	15	8.7
3	20	6.0	36	170	27	111	49	21	8.1	586	15	8.2
4	16	9.5	32	151	26	162	170	18	8.7	175	14	7.3
5	13	33	29	99	55	391	256	54	9.1	110	13	6.7
6	12	15	26	90	116	215	126	52	14	87	12	6.4
7	12	12	24	69	140	135	100	33	11	65	13	6.6
8	11	10	21	68	97	103	86	26	14	73	12	6.6
9	10	30	19	80	72	82	77	25	20	76	11	6.6
10	9.3	40	17	152	59	64	63	34	13	51	11	6.7
11	8.7	20	16	458	51	56	54	25	11	42	10	7.0
12	8.2	8.6	15	485	44	49	43	21	10	37	10	6.8
13	8.0	14	14	669	40	43	40	19	16	34	9.6	6.6
14	7.8	11	13	300	37	38	37	20	21	30	10	6.3
15	6.5	9.5	12	190	34	33	48	20	118	27	11	6.9
16	6.3	11	11	137	32	30	32	18	117	278	11	6.3
17	6.1	16	11	105	30	28	27	17	74	177	11	5.8
18	5.5	12	11	86	31	27	25	16	44	86	11	5.7
19	6.0	12	10	69	33	24	26	16	56	69	9.8	5.5
20	5.9	290	10	60	29	24	23	21	56	55	11	5.3
21	6.7	145	12	50	114	47	20	16	258	41	10	5.3
22	6.1	85	26	47	95	53	18	14	189	60	9.4	5.6
23	5.6	65	28	38	70	70	17	17	117	65	9.1	8.5
24	5.2	53	27	35	54	61	16	13	82	42	8.5	6.4
25	5.1	45	23	34	41	53	17	12	59	35	8.8	10
26	5.1	41	18	31	39	47	17	11	39	41	8.5	23
27	5.2	111	15	31	139	43	18	10	32	41	8.8	6.6
28	5.3	104	21	28	741	40	18	9.5	29	32	8.1	5.6
29	5.6	69	21	27	---	39	20	8.8	27	23	8.1	9.5
30	5.1	56	30	36	---	108	18	8.3	25	22	8.1	26
31	5.6	---	106	33	---	84	---	8.3	---	16	10	---
TOTAL	284.9	1346.2	740	4030	2303	2656	1574	641.9	1493.9	2550	332.8	240.3
MEAN	9.19	44.9	23.9	130	82.2	85.7	52.5	20.7	49.8	82.3	10.7	8.01
MAX	31	290	106	669	741	391	256	54	258	586	15	26
MIN	5.1	6.0	10	27	26	24	16	8.3	8.0	16	8.1	5.3
CFSM	.41	2.01	1.07	5.83	3.69	3.84	2.35	.93	2.23	3.69	.48	.36
IN.	.48	2.25	1.23	6.72	3.84	4.43	2.63	1.07	2.49	4.25	.56	.40

CAL YR 1988 TOTAL 9317.6 MEAN 25.5 MAX 819 MIN 3.6 CFSM 1.14 IN. 15.54
WTR YR 1989 TOTAL 18193.0 MEAN 49.8 MAX 741 MIN 5.1 CFSM 2.24 IN. 30.35

02403500 COLDWATER SPRING NEAR ANNISTON, AL

LOCATION.--Lat 33°36'10", long 85°55'33", in SE¼ sec. 29, T. 16 S., R. 7 E., Calhoun County, Hydrologic Unit 03150106, in pool of Coldwater Spring, 200 ft upstream from Coldwater Creek, 2 mi upstream from Choccolocco Creek, and 7 mi southwest of Anniston.

PERIOD OF RECORD.--July 1944 to March 1947, April 1957 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Elevation of gage is 590 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 31, 1947, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Records of discharge include flow over weir and diversion from pool of an average of 20.5 ft^3/s for municipal water supply for City of Anniston as determined by Venturi-meter readings. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

COOPERATION.--Records provided by the Water Works and Sewer Board of the City of Anniston.

AVERAGE DISCHARGE.--34 years (water years 1945-46, 1958-89), 47.2 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge for 7-day period, 66 ft^3/s, Apr. 1-7, 1976; minimum discharge for 5-day period, 29.6 ft^3/s, Aug. 8-12. 1986.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 49 ft^3/s, Apr. 6-7, 10, 11, 13, 15, 16, 18; minimum daily, 30 ft^3/s, Nov. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	32	34	33	36	39	44	47	42	46	47	45
2	34	31	32	33	36	40	44	47	42	46	47	45
3	34	32	33	34	36	40	45	46	42	46	47	45
4	33	32	33	34	36	40	45	45	42	46	48	44
5	33	32	33	33	36	42	47	46	42	47	47	45
6	33	31	33	35	37	43	49	44	42	47	46	45
7	33	31	34	34	36	42	49	44	42	48	46	45
8	32	31	33	34	36	42	48	44	42	48	46	45
9	34	31	33	34	37	42	48	45	42	48	46	44
10	34	32	33	34	37	42	49	44	41	48	46	45
11	34	30	33	34	37	43	49	44	41	47	46	44
12	33	31	32	36	37	43	48	44	41	48	46	44
13	33	31	33	35	38	43	49	44	41	48	45	44
14	33	31	33	36	38	43	48	44	41	48	46	44
15	33	32	33	37	37	42	49	44	41	47	46	44
16	33	32	32	37	37	42	49	43	42	46	46	45
17	33	31	32	37	37	43	48	44	43	48	46	44
18	33	32	32	37	37	42	49	43	43	48	46	44
19	33	32	32	36	38	41	48	43	44	48	46	44
20	33	32	32	37	38	42	48	43	46	48	45	43
21	33	32	32	36	38	42	48	43	46	48	46	43
22	33	32	32	37	38	42	48	43	47	48	45	43
23	33	33	33	38	38	44	48	43	47	48	45	43
24	32	33	32	36	38	44	48	43	48	48	45	43
25	32	32	32	37	39	44	48	43	46	48	45	44
26	32	34	32	37	39	46	47	42	47	48	44	43
27	32	34	32	36	40	45	48	42	47	48	44	43
28	31	33	32	36	39	45	47	42	46	48	44	44
29	31	33	32	36	---	45	47	42	46	47	44	43
30	32	34	32	37	---	45	47	42	46	47	46	44
31	32	---	32	37	---	44	---	42	---	47	45	---
TOTAL	1017	959	1008	1103	1046	1322	1429	1355	1308	1471	1417	1321
MEAN	32.8	32.0	32.5	35.6	37.4	42.6	47.6	43.7	43.6	47.5	45.7	44.0
MAX	34	34	34	38	40	46	49	47	48	48	48	45
MIN	31	30	32	33	36	39	44	42	41	46	44	43

CAL YR 1988 TOTAL 12550 MEAN 34.3 MAX 39 MIN 30
WTR YR 1989 TOTAL 14756 MEAN 40.4 MAX 49 MIN 30

02404400 CHOCCOLOCCO CREEK AT JACKSON SHOALS, NEAR LINCOLN, AL

LOCATION.--Lat 33°32'54", long 86°05'49", in SE¼SE¼ sec. 15, T. 17 S., R. 5 E., Talladega County, Hydrologic Unit 03150106, on left bank at foot of Jackson Shoals, 50 ft upstream from Alabama Power Company Jackson Shoals transformer station, 900 ft upstream from highway bridge, 1.8 mi downstream from Eastaboga Creek, and 4.5 mi southeast of Lincoln.

DRAINAGE AREA.--481 mi².

PERIOD OF RECORD.--October 1960 to September 1967, October 1967 to September 1970 (annual peak discharge only), October 1970 to September 1974 (gage-height record only in files of Geological Survey), October 1974 to September 1984 (flood hydrograph only), October 1984 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 448.50 ft above National Geodetic Vertical Datum of 1929 (Alabama Power Company benchmark).

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--12 years (water years 1961-67, 1985-89), 668 ft³/s, 18.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,900 ft³/s, Apr. 30, 1963, gage height, 39.98 ft; minimum discharge, 105 ft³/s, Aug. 7, 8, 9, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1951 reached a stage of 42.4 ft from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 6	0800	*7,700	*26.38	Apr. 5	0900	6,590	25.53

Minimum discharge, 150 ft³/s, Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	165	378	922	441	2010	1200	621	311	864	542	680
2	222	168	348	750	418	1730	1040	840	302	855	511	531
3	276	163	327	747	399	1430	1030	704	310	1010	525	415
4	377	166	315	1010	388	1570	1730	606	314	1980	579	368
5	240	263	300	951	384	3950	5750	599	319	3080	526	345
6	206	235	290	822	430	6660	4740	710	349	4120	461	338
7	189	207	285	682	676	4870	3630	639	361	3890	425	323
8	178	212	276	604	797	3380	2750	581	342	2230	404	319
9	178	204	272	561	726	2440	3680	556	340	1650	385	302
10	169	196	264	572	646	1940	2830	580	323	1610	368	323
11	165	189	263	596	582	1660	2200	557	316	1200	361	387
12	161	190	253	649	546	1460	1780	551	302	1130	352	345
13	160	227	242	1180	509	1260	1480	508	297	1240	344	345
14	157	248	236	1560	476	1130	1280	482	292	997	346	334
15	155	229	233	1450	458	975	1270	541	689	872	691	316
16	154	231	230	1230	429	861	1200	526	2050	778	479	319
17	155	392	228	995	411	768	1060	488	1830	731	419	302
18	152	330	223	827	426	703	969	449	1400	696	379	292
19	155	322	222	735	444	646	900	428	1890	671	357	281
20	158	462	216	669	471	611	843	412	2420	1380	353	274
21	166	698	213	606	1160	1190	790	421	3650	1070	336	274
22	186	537	212	556	1440	1540	744	411	4170	879	327	275
23	173	447	214	516	1200	2210	708	419	3720	855	317	281
24	173	378	217	492	988	2780	672	438	2590	829	311	270
25	167	341	214	463	803	2300	636	415	1730	790	310	289
26	166	316	212	440	720	1740	611	386	1320	697	304	403
27	166	583	212	428	674	1420	588	367	1110	658	435	359
28	166	563	215	411	1900	1170	564	347	1010	609	360	328
29	166	472	215	401	---	1030	544	335	1430	565	331	312
30	163	416	220	424	---	1730	541	326	956	532	313	318
31	161	---	402	478	---	1480	---	319	---	515	576	---
TOTAL	5631	9550	7947	22727	18942	58644	47760	15562	36443	38983	12727	10248
MEAN	182	318	256	733	676	1892	1592	502	1215	1258	411	342
MAX	377	698	402	1560	1900	6660	5750	840	4170	4120	691	680
MIN	152	163	212	401	384	611	541	319	292	515	304	270
CFSM	.38	.66	.53	1.52	1.41	3.93	3.31	1.04	2.53	2.61	.85	.71
IN.	.44	.74	.61	1.76	1.46	4.54	3.69	1.20	2.82	3.01	.98	.79

CAL YR 1988 TOTAL 118322 MEAN 323 MAX 4160 MIN 116 CFSM .67 IN. 9.15
WTR YR 1989 TOTAL 285154 MEAN 781 MAX 6660 MIN 152 CFSM 1.62 IN. 22.05

02405500 KELLY CREEK NEAR VINCENT, AL

LOCATION.--Lat 33°26'51", long 86°23'13", in SW¼ sec. 24, T. 18 S., R. 2 E., Shelby County, Hydrologic Unit 03150106, on downstream side of left pier of bridge on U.S. Highway 231, 1.5 mi downstream from Little Creek, 4.2 mi north of Vincent, and 5 mi upstream from mouth.

DRAINAGE AREA.--193 mi^2.

PERIOD OF RECORD.--November 1951 to September 1970, June 1979 to September 1981 (discharge measurements only), October 1986 to current year.

REVISED RECORDS.--WSP 1383: Drainage area. WSP 1906: 1952, 1957.

GAGE.--Water-stage recorder. Datum of gage is 434.40 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: May 1-12, 15, 24-27, Aug. 7, 8, 15, 16, 25-29. Records good except those for periods of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--21 years (water years 1953-70, 1987-89), 317 ft^3/s, 22.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 30,900 ft^3/s, Feb. 22, 1961, gage height, 27.08 ft; minimum daily discharge, 1.1 ft^3/s, Oct. 17, 18, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 6	1000	6,540	12.03	June 22	0245	*8,070	*19.18

Minimum daily discharge, 15 ft^3/s, Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	31	392	1870	199	1500	845	e120	20	284	72	40
2	717	28	309	1100	180	860	632	e180	19	2590	63	62
3	555	31	256	898	166	681	566	e110	18	3250	72	46
4	333	50	219	897	159	1190	1000	e86	17	2390	128	39
5	200	496	188	639	169	5320	3160	e110	18	2930	81	32
6	137	251	165	545	303	6280	1640	e120	33	1620	59	25
7	105	135	149	473	714	2950	968	e200	48	1030	e70	21
8	86	104	137	413	655	1110	728	e110	39	716	e85	18
9	71	105	124	404	468	710	1280	e101	49	661	58	17
10	62	86	113	761	382	511	919	e160	65	693	46	16
11	54	75	105	809	340	390	699	e120	44	472	40	73
12	46	68	97	894	300	350	571	e92	36	356	35	61
13	39	199	87	2450	263	320	496	77	34	306	32	41
14	33	215	81	1750	235	294	415	75	37	293	29	47
15	29	155	77	1260	211	270	421	e130	225	226	e35	38
16	27	144	75	926	189	247	381	107	265	180	e60	29
17	25	242	71	716	177	225	302	83	233	151	40	23
18	23	169	66	593	177	207	264	71	99	122	36	19
19	22	136	62	512	235	189	230	63	592	137	33	17
20	21	1820	60	439	265	174	219	62	977	474	29	15
21	24	1450	58	360	1040	1540	190	66	5010	242	26	17
22	38	707	58	310	809	1380	168	73	6440	203	22	417
23	41	471	124	281	536	1500	148	66	1900	293	20	509
24	34	355	262	256	412	1480	131	e55	726	248	18	205
25	31	272	171	229	350	966	116	e50	414	213	e17	248
26	28	230	134	209	319	723	107	e44	324	167	e16	676
27	26	1030	121	200	304	563	100	e39	249	134	e20	351
28	24	1020	124	183	2080	458	93	35	212	109	e28	217
29	25	657	146	156	---	438	87	31	184	95	e20	272
30	25	495	131	221	---	2330	82	26	155	82	20	575
31	30	---	851	262	---	1420	---	22	---	78	47	---
TOTAL	2946	11227	5013	21016	11637	36576	16958	2684	18482	20745	1357	4166
MEAN	95.0	374	162	678	416	1180	565	86.6	616	669	43.8	139
MAX	717	1820	851	2450	2080	6280	3160	200	6440	3250	128	676
MIN	21	28	58	156	159	174	82	22	17	78	16	15
CFSM	.49	1.94	.84	3.51	2.15	6.11	2.93	.45	3.19	3.47	.23	.72
IN.	.57	2.16	.97	4.05	2.24	7.05	3.27	.52	3.56	4.00	.26	.80

CAL YR 1988 TOTAL 58672.6 MEAN 160 MAX 3010 MIN 1.4 CFSM 0.83 IN. 11.31
WTR YR 1989 TOTAL 152807 MEAN 419 MAX 6440 MIN 15 CFSM 2.17 IN. 29.45

e Estimated

02406500 TALLADEGA CREEK AT ALPINE, AL

LOCATION.--Lat 33°21'34", long 86°14'03", in SW¼ sec. 21, T. 19 S., R. 4 E., Talladega County, Hydrologic Unit 03150106, at bridge on county road 207, 1 mi north of Alpine, 9 mi southwest of Talladega, and 11.0 mi upstream from mouth.

DRAINAGE AREA.--150 mi².

PERIOD OF RECORD.--August 1900 to December 1904, January 1939 to September 1951, October 1951 to September 1970 (peak discharge only), October 1987 to current year. Monthly discharge only for period October to December 1938, published in WSP 1304. Published as "at Nottingham" 1900-04.

REVISED RECORDS.--WDR AL-88-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 431.24 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--19 years (water years 1901-04, 1939-51, 1988-89), 235 ft³/s, 21.28 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,000 ft³/s, Mar. 29, 1951, gage height, 16.6 ft, from rating curve extended above 14,000 ft³/s on basis of slope-area measurement; minimum daily discharge, 20 ft³/s, June 18, 1904.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 6	1200	3,010	11.86	Apr. 5	1600	*3,410	*12.30

Minimum daily discharge, 68 ft³/s, Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	91	162	723	176	466	451	247	125	231	181	131
2	95	97	149	492	165	378	395	348	122	261	170	127
3	164	89	140	357	158	361	436	252	119	370	208	117
4	153	86	134	375	156	473	529	228	127	762	179	113
5	122	140	129	299	153	826	2670	236	131	901	163	108
6	102	193	127	254	157	2370	1290	272	160	1000	158	105
7	94	131	121	223	301	931	699	232	148	592	151	104
8	88	113	119	201	361	587	598	211	131	450	145	106
9	83	107	117	186	260	485	832	208	126	373	140	104
10	80	105	114	189	220	420	743	233	127	352	137	104
11	79	102	111	188	202	376	631	233	121	320	135	104
12	78	96	112	199	187	345	548	204	116	365	132	183
13	73	120	110	424	176	[illegible]	499	191	115	391	130	170
14	71	157	107	534	169	296	460	191	126	334	134	136
15	70	133	106	429	161	277	490	303	325	342	324	116
16	69	[illegible]	105	386	155	261	480	250	975	332	211	110
17	68	[illegible]	105	314	148	245	422	205	605	280	179	110
18	69	193	101	271	150	236	391	187	307	254	168	104
19	70	156	99	243	152	226	373	177	707	233	157	100
20	77	388	98	225	156	219	356	174	920	231	140	97
21	88	511	98	207	497	659	331	178	685	244	134	111
22	89	297	97	191	549	838	312	172	1550	263	129	420
23	90	223	99	180	362	905	297	167	639	265	127	189
24	80	186	103	174	285	894	283	177	457	244	123	160
25	76	167	112	167	246	582	271	159	354	225	120	153
26	74	153	111	162	227	484	260	152	290	215	118	271
27	73	294	104	159	220	417	250	145	252	209	123	192
28	73	260	102	155	444	375	241	139	230	194	135	150
29	75	201	107	150	---	360	232	133	281	185	118	135
30	95	180	114	165	---	737	227	131	263	178	113	135
31	94	---	542	204	---	562	---	129	---	199	114	---
TOTAL	2683	5326	3955	8426	6593	16909	15997	6264	10634	10795	4696	4265
MEAN	86.5	178	128	272	235	545	533	202	354	348	151	142
MAX	164	511	542	723	549	2370	2670	348	1550	1000	324	420
MIN	68	86	97	150	148	219	227	129	115	178	113	97
CFSM	.58	1.18	.85	1.81	1.57	3.64	3.55	1.35	2.36	2.32	1.01	.95
IN.	.67	1.32	.98	2.09	1.64	4.19	3.97	1.55	2.64	2.68	1.16	1.06

CAL YR 1988 TOTAL 53401 MEAN 146 MAX 2530 MIN 38 CFSM .97 IN. 13.24
WTR YR 1989 TOTAL 96543 MEAN 265 MAX 2670 MIN 68 CFSM 1.76 IN. 23.94

02408540 HATCHET CREEK BELOW ROCKFORD, AL

LOCATION.--Lat 32°55'00", long 86°16'13", in SE¼SE¼ sec. 4, T. 22 N., R. 18 E., Coosa County, Hydrologic Unit 03150107, on downstream side of pier near right bank of bridge on county highway, 2.1 mi downstream from Jack Creek, and 4 mi northwest of Rockford.

DRAINAGE AREA.--263 mi^2.

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 377 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: July 16 to Aug. 11. Records good except for period of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--9 years, 379 ft^3/s, 19.57 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft^3/s, Feb. 3, 1982, gage height, 25.65 ft; minimum discharge, 11 ft^3/s, Sept. 2, 3, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 5	0800	6,790	13.23	July 3	2100	6,180	12.54
June 19	1500	*12,800	*18.53	July 5	1700	4,010	9.87

Minimum discharge, 111 ft^3/s, Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	181	223	1230	257	719	807	512	214	453	e350	268
2	991	175	206	794	243	596	711	610	198	401	e330	217
3	776	154	197	578	235	638	647	432	189	2320	e300	187
4	413	152	189	664	251	724	866	395	237	2810	e350	172
5	260	554	181	487	262	2080	5200	405	486	2510	e310	159
6	207	357	175	419	260	3230	1860	476	391	2100	e290	154
7	186	214	171	368	503	1410	1120	398	323	1050	e270	167
8	180	194	168	333	583	968	917	363	249	787	e255	177
9	171	239	164	303	413	809	1350	372	257	628	e245	163
10	165	206	160	298	346	694	1560	660	241	515	e235	152
11	156	192	167	306	314	601	1220	487	463	460	e225	154
12	146	175	172	307	290	549	963	395	452	526	216	167
13	135	510	160	598	269	528	871	359	275	693	208	173
14	129	419	156	725	257	516	816	363	244	625	234	159
15	128	289	156	735	248	496	825	514	633	917	826	145
16	127	252	168	622	236	477	791	428	1270	e700	508	139
17	124	358	165	494	227	450	675	355	979	e500	395	143
18	121	323	155	424	230	438	620	325	508	e400	310	131
19	116	261	151	376	251	425	585	315	6690	e350	265	125
20	118	401	149	365	256	424	599	319	2650	e400	237	122
21	193	694	149	322	1180	1260	544	355	1170	e600	222	141
22	204	382	150	289	1020	1690	518	311	987	e300	212	1280
23	158	294	154	273	635	1920	501	396	838	e400	202	1160
24	141	251	176	261	495	1600	480	402	594	e600	191	443
25	132	224	165	249	431	1010	459	312	487	e400	183	400
26	128	205	155	239	397	873	438	282	391	e300	184	707
27	130	411	154	245	377	764	424	260	333	e700	246	411
28	126	397	164	235	694	678	408	250	307	e500	213	284
29	127	282	183	226	---	626	394	237	402	e300	183	252
30	182	245	179	259	---	1330	386	228	325	e350	210	271
31	168	---	810	330	---	990	---	222	---	e400	224	---
TOTAL	6497	8991	5872	13354	11160	29513	27555	11838	22783	23995	8629	8623
MEAN	210	300	189	431	399	952	918	382	759	774	278	287
MAX	991	694	810	1230	1180	3230	5200	660	6690	2810	826	1280
MIN	116	152	149	226	227	424	386	222	189	300	183	122
CFSM	.80	1.14	.72	1.64	1.52	3.62	3.49	1.45	2.89	2.94	1.06	1.09
IN.	.92	1.27	.83	1.89	1.58	4.17	3.90	1.67	3.22	3.39	1.22	1.22

CAL YR 1988 TOTAL 104256 MEAN 285 MAX 14000 MIN 11 CFSM 1.08 IN. 14.75
WTR YR 1989 TOTAL 178810 MEAN 490 MAX 6690 MIN 116 CFSM 1.86 IN. 25.29

e Estimated

MOBILE RIVER MAIN STEM

02411000 COOSA RIVER AT JORDAN DAM, NEAR WETUMPKA, AL

LOCATION.--Lat 32°36'50", long 86°15'18", in SE¼NW¼ sec. 22, T. 19 N., R. 18 E., Elmore County, Hydrologic Unit 03150107, on right bank 0.5 mi downstream from Jordan Dam, 4 mi upstream from Corn Creek, 5.5 mi northwest of Wetumpka, and at mile 18.6.

DRAINAGE AREA.--10,102 mi².

PERIOD OF RECORD.--July 1912 to September 1914, December 1925 to current year. Prior to October 1936 published as "at Lock 18, near Wetumpka."

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Nonrecording gage since April 1975. Datum of gage is 141.6 ft above National Geodetic Vertical Datum of 1929 (levels by Alabama Power Co.). February 1926 to March 1975, water-stage recorder. July 1912 to September 1914, nonrecording gage at site 0.2 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Prior to June 30, 1967, and Feb. 10, 1975, to current year, daily discharge above 100 ft³/s, computed on basis of powerplant records and flow over spillway at Jordan Dam; July 1, 1967, to Feb. 9, 1975, on the combined flow through turbines at Jordan and Bouldin Dams (on diversion channel from Jordan Lake about 1 mi upstream from Jordan Dam) and flow over spillway at Jordan Dam. Flow regulated by several upstream reservoirs and hydroelectric plants.

COOPERATION.--Records collected by Alabama Power Co., under general supervision of U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--65 years (water years 1913-14, 1927-89), 16,270 ft³/s, 21.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 316,000 ft³/s, Apr. 13, 1979, gage height, 47.67 ft, computed on basis of powerplant records and flow over spillway; minimum daily, 54 ft³/s, Oct. 15, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 88,300 ft³/s, June 22, computed on basis of powerplant records and flow over spillway; minimum daily, 530 ft³/s, Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9720	4080	12800	38000	9090	54500	23900	15500	7080	20400	9740	9010
2	18400	4870	12800	26300	7310	49600	16100	9570	5580	29300	8810	7160
3	8660	8660	7100	28200	13300	40800	19900	12800	570	35600	17700	570
4	6270	14900	3030	26300	600	44200	27700	13100	560	49200	13600	7230
5	6160	12100	10200	24500	1440	81000	71300	15400	7770	54800	11700	7760
6	6190	590	9470	24000	20800	85800	73700	17400	10400	48900	9740	7120
7	4400	8810	9560	17800	23200	70600	48500	22600	11300	44000	7880	7430
8	570	8540	7930	13700	27200	60100	43600	18200	11600	38500	5870	7410
9	580	9230	6840	18600	29100	58600	54000	16800	11300	37700	5670	530
10	4100	10900	5150	20300	24500	54300	57000	20600	7230	33400	5680	2910
11	4570	11300	620	35500	9100	55500	44700	18400	4470	31400	4920	7690
12	4500	2260	10200	36500	10600	49800	39600	15100	9010	20500	600	8470
13	4870	6320	9220	48400	10200	42700	35500	10400	10900	21100	570	7800
14	5820	6290	5320	55800	8410	39500	26800	8600	11500	27700	1870	7100
15	570	9410	4790	52500	14700	35500	17700	11700	26900	20800	7040	7240
16	570	12800	7010	47300	12100	26900	14800	10200	50000	23600	10300	570
17	5330	13200	5410	38600	14100	18300	14600	9350	50700	21200	10800	570
18	5000	11400	1240	38000	7760	12400	17300	14100	40900	20100	10100	6320
19	4800	7300	8200	34000	580	10300	14700	12300	63300	18400	590	6980
20	5130	23700	4550	31100	17700	19800	14300	6060	63900	20700	570	7880
21	14100	23500	4160	22200	34400	36700	11000	570	73000	22200	7650	9470
22	560	19500	5040	11000	35200	34500	6760	9790	88300	17200	7450	12500
23	560	21200	4320	10800	30200	38700	610	12800	83200	22300	8780	4960
24	6350	13300	600	9660	26300	32500	7380	8880	64800	29000	7850	570
25	5840	11200	4110	10700	17300	31400	8160	9540	47500	25600	7560	16500
26	5050	9730	6800	10600	16000	32300	6300	7390	39000	24300	1210	17000
27	4860	20600	11600	10900	24200	17500	7800	590	34500	12700	11500	13100
28	5010	13600	12600	2790	44100	13700	4200	590	33300	14500	7670	16600
29	570	12900	11700	2030	---	26200	570	6500	31400	9140	7930	20700
30	570	15000	17700	20200	---	43400	2170	7670	23700	3490	9750	26000
31	4120	---	26900	14500	---	27100	---	8030	---	10300	7900	---
TOTAL	153800	347190	246970	780780	489490	1244200	730650	350530	923670	808030	229000	255150
MEAN	4961	11570	7967	25190	17480	40140	24350	11310	30790	26070	7387	8505
MAX	18400	23700	26900	55800	44100	85800	73700	22600	88300	54800	17700	26000
MIN	560	590	600	2030	580	10300	570	570	560	3490	570	530
CFSM	.49	1.15	.79	2.49	1.73	3.97	2.41	1.12	3.05	2.58	.73	.84
IN.	.57	1.28	.91	2.88	1.80	4.58	2.69	1.29	3.40	2.98	.84	.94

CAL YR 1988 TOTAL 2790780 MEAN 7625 MAX 83900 MIN 560 MEAN †7626 CFSM †0.75 IN. †10.25
WTR YR 1989 TOTAL 6559460 MEAN 17970 MAX 88300 MIN 530 MEAN †18205 CFSM †1.80 IN. †24.47

† Adjusted for change in contents in Allatoona Reservoir, Weiss Lake, H. Neely Henry Reservoir, Logan Martin Reservoir, and combined Lay, Mitchell, and Jordan Lakes.

MOBILE RIVER MAIN STEM

02411600 (NWS 01-8859-5) COOSA RIVER AT WETUMPKA, AL

LOCATION.--Lat 32°32'13", long 86°12'32", in SE¼ sec. 13, T. 18 N., R. 18 E., Elmore County, Hydrologic Unit 03150107, on downstream side of bridge on State Highway 14, in Wetunpka, and at mile 11.45.

DRAINAGE AREA.--10,148 mi^2.

PERIOD OF RECORD.--1893 to current year (gage heights only). October 1971 to current year in reports of Geological Survey; January 1900 to December 1971 in reports of National Weather Service.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 113.72 ft above National Geodetic Vertical Datum of 1929.

COOPERATION.--Records provided by National Weather Service.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 57.9 ft, Apr. 8, 1938; minimum gage height 2.5 ft, Aug. 4, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 1, 1886, reached a stage of 61.7 ft, from floodmarks.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 42.13 ft, June 23; minimum gage height, 10.64 ft, Feb. 26.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.67	12.01	13.96	22.03	12.52	21.33	17.70	13.29	12.63	14.44	12.73	12.60
2	15.63	12.23	14.55	21.09	12.25	23.28	15.49	12.91	12.93	15.05	12.89	12.39
3	12.73	12.30	13.10	19.62	12.44	20.23	13.61	13.48	12.52	19.40	12.66	12.62
4	12.98	12.79	12.83	19.92	12.74	19.11	13.59	12.51	12.03	24.52	12.86	11.54
5	13.06	12.77	13.76	17.54	12.13	25.51	26.02	12.56	11.93	26.49	12.32	12.22
6	12.70	12.61	13.99	16.41	11.51	30.62	28.50	13.17	12.49	27.05	12.22	12.28
7	12.63	12.77	13.85	13.63	14.31	29.33	29.04	14.09	12.85	26.49	12.41	12.31
8	12.50	12.26	12.73	12.49	13.85	27.58	27.67	14.29	12.81	25.49	12.43	12.65
9	12.01	11.68	13.73	13.39	16.09	25.80	27.53	13.50	12.69	24.08	12.67	13.04
10	11.88	12.67	12.66	14.27	15.38	24.73	27.65	12.66	12.86	21.16	12.42	11.77
11	11.91	12.79	12.56	15.97	12.70	23.79	25.39	13.20	12.60	18.20	12.67	12.29
12	11.99	12.75	13.54	17.64	11.09	22.74	26.64	12.39	12.93	14.92	12.73	12.50
13	12.76	13.02	14.61	19.56	13.53	20.79	24.16	12.65	13.15	13.75	12.04	12.59
14	13.18	11.85	13.78	22.12	12.76	19.27	19.83	11.96	13.18	15.32	11.71	12.70
15	12.59	12.23	12.81	23.63	13.03	17.34	14.65	12.11	13.50	14.33	12.36	12.97
16	12.07	12.39	13.43	22.38	12.37	16.96	13.19	12.22	20.52	13.65	12.76	12.74
17	11.90	11.60	12.83	19.89	12.37	14.62	12.13	12.19	28.38	13.85	13.00	12.24
18	12.25	12.32	12.87	18.89	11.93	12.60	13.36	12.49	29.19	14.65	12.64	11.62
19	12.30	12.85	13.27	17.14	11.83	12.33	12.34	12.26	29.10	14.01	12.67	11.64
20	12.22	14.55	13.38	17.66	11.84	13.46	12.57	12.47	33.02	12.49	12.28	11.86
21	12.44	16.90	13.31	16.79	13.89	17.16	13.23	12.17	37.49	15.01	11.72	12.23
22	12.96	14.80	12.47	13.21	13.51	18.44	13.04	11.52	41.54	14.60	12.73	12.40
23	12.21	14.82	12.43	12.67	12.38	21.19	12.88	12.60	42.13	14.99	12.96	12.64
24	12.34	12.19	12.57	13.58	11.51	22.68	12.54	12.57	39.16	19.28	12.92	12.30
25	12.34	12.59	12.37	14.12	11.40	22.03	12.54	13.32	34.62	19.75	12.88	11.40
26	13.15	12.54	12.03	14.11	10.64	22.28	13.00	13.14	28.00	18.39	12.91	13.86
27	12.46	13.18	12.80	12.69	11.92	18.11	12.86	12.63	22.06	15.15	12.51	13.85
28	12.14	17.20	13.13	12.37	17.60	14.20	12.91	12.19	19.33	13.03	12.69	13.18
29	12.17	15.31	14.27	11.98	---	12.96	11.99	11.96	18.71	12.39	12.60	14.45
30	11.60	15.20	14.39	13.08	---	21.46	11.78	12.05	16.70	12.67	12.69	13.37
31	11.73	---	13.18	14.42	---	20.63	---	12.52	---	12.22	13.04	---
MEAN	12.50	13.17	13.26	16.59	12.84	20.41	17.59	12.68	21.03	17.32	12.58	12.54
MAX	15.63	17.20	14.61	23.63	17.60	30.62	29.04	14.29	42.13	27.05	13.04	14.45
MIN	11.60	11.60	12.03	11.98	10.64	12.33	11.78	11.52	11.93	12.22	11.71	11.40

CAL YR 1988 MEAN 12.88 MAX 29.76 MIN 10.99
WTR YR 1989 MEAN 15.22 MAX 42.13 MIN 10.64

02412000 TALLAPOOSA RIVER NEAR HEFLIN, AL

LOCATION.--Lat 33°37'22", long 85°31'20", in NW¼NW¼ sec. 20, T. 16 S., R. 11 E., Cleburne County, Hydrologic Unit 03150108, on right bank 5 ft downstream from county road bridge, 2.2 mi upstream from Cane Creek, 4 mi southeast of Heflin, and at mile 186.8.

DRAINAGE AREA.--448 mi^2.

PERIOD OF RECORD.--July 1952 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 830 ft, by barometer.

REMARKS.--No estimated daily discharges. Records good. Slight diurnal fluctuation caused by small mills above station. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--37 years, 682 ft^3/s, 20.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,500 ft^3/s, Mar. 31, 1977, gage height, 31.34 ft; minimum daily, 13 ft^3/s, Oct. 9, 10, 13, 14, 20-22, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 6	2200	5,000	13.82	June 23	0100	*6,680	*17.03
Apr. 6	0100	5,010	13.85	July 23	1900	4,000	11.67

Minimum daily discharge, 59 ft^3/s, Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	107	255	594	301	2220	589	831	254	770	600	703
2	142	130	227	581	287	1170	514	1150	255	615	701	607
3	236	136	211	568	275	806	512	856	267	678	578	488
4	272	121	201	1070	271	676	764	600	273	950	472	384
5	275	292	191	818	271	2240	4200	549	302	1310	417	320
6	214	400	187	543	307	3920	3650	853	388	1570	377	291
7	150	323	180	483	487	2830	1580	684	372	1530	355	288
8	117	243	177	425	667	1160	1130	539	323	1000	330	288
9	99	218	174	385	535	834	1500	521	314	748	313	278
10	90	196	171	395	421	692	1340	888	323	668	307	273
11	83	196	167	457	368	604	1010	1310	293	581	299	458
12	77	193	164	482	341	552	843	824	270	523	288	636
13	72	204	161	1070	323	509	757	612	259	495	277	553
14	68	231	159	1370	308	479	697	545	290	544	276	429
15	66	210	158	939	300	455	708	667	1120	465	448	362
16	66	201	159	707	288	434	727	631	2810	456	680	536
17	66	237	156	557	277	411	669	556	2700	573	483	533
18	66	244	152	466	292	397	608	467	1380	560	876	390
19	67	215	150	411	352	386	570	422	856	564	727	326
20	67	336	149	376	430	371	544	406	962	755	451	294
21	76	504	150	348	1510	813	518	441	2550	1010	365	280
22	103	348	151	324	2140	1630	498	428	5530	1010	350	285
23	106	285	156	311	1170	2090	477	534	5740	2920	342	284
24	97	248	161	296	713	2310	457	537	2050	2760	308	269
25	91	222	172	285	554	1300	437	402	1160	1280	285	295
26	85	206	177	277	479	906	419	360	877	814	276	590
27	83	281	168	278	470	737	404	330	726	734	310	585
28	83	351	168	275	1840	641	387	309	629	698	299	466
29	83	317	175	272	---	584	374	291	740	587	301	665
30	83	285	176	289	---	643	371	273	825	513	286	1030
31	86	---	319	318	---	659	---	265	---	482	1130	---
TOTAL	3328	7480	5522	15970	15977	33459	27254	18081	34838	28163	13507	13186
MEAN	107	249	178	515	571	1079	908	583	1161	908	436	440
MAX	275	504	319	1370	2140	3920	4200	1310	5740	2920	1130	1030
MIN	59	107	149	272	271	371	371	265	254	456	276	269
CFSM	.24	.56	.40	1.15	1.27	2.41	2.03	1.30	2.59	2.03	.97	.98
IN.	.28	.62	.46	1.33	1.33	2.78	2.26	1.50	2.89	2.34	1.12	1.09

CAL YR 1988 TOTAL 98781 MEAN 270 MAX 4750 MIN 28 CFSM .60 IN. 8.20
WTR YR 1989 TOTAL 216765 MEAN 594 MAX 5740 MIN 59 CFSM 1.33 IN. 18.00

02413300 LITTLE TALLAPOOSA RIVER NEAR NEWELL, AL

LOCATION.--Lat 33°26'14", long 85°23'57", in SW¼SW¼ sec. 21, T. 18 S., R. 12 E., Randolph County, Hydrologic Unit 03150108, near right bank on downstream side of bridge on County Highway 82, 1.0 mi upstream from Cut Nose Creek, and 2.0 mi east of Newell.

DRAINAGE AREA.--406 mi².

PERIOD OF RECORD.--May 1975 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 842.92 ft above National Geodetic Vertical Datum of 1929 (datum published incorrectly 1976-86).

REMARKS.--No estimated daily discharges. Records good. Low flow can be affected by regulation from gristmill located 3.2 mi upstream. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE:--14 years, 569 ft³/s, 19.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s, Mar. 16, 1976, gage height, 18.18 ft; minimum discharge, 37 ft³/s, Oct. 6, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of February 1975 reached a stage of 19.3 ft from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 21	2100	*5,940	*12.18				

Minimum discharge, 66 ft³/s, Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	154	351	674	285	1170	614	489	207	480	705	418
2	225	176	298	585	274	1070	542	586	234	465	704	477
3	1370	171	268	578	267	817	532	548	217	607	553	414
4	1230	155	249	748	263	680	928	470	211	796	470	304
5	781	340	235	615	267	749	3420	476	243	1480	411	247
6	389	344	221	489	283	1400	2580	574	314	1460	366	227
7	267	300	216	418	418	1150	2020	547	330	1190	332	222
8	210	234	209	376	497	861	1450	450	345	900	296	214
9	176	209	203	357	438	682	1350	409	345	714	276	208
10	153	209	198	350	363	585	1270	498	319	602	263	250
11	137	197	195	345	322	525	1060	597	291	531	255	299
12	125	185	200	344	303	484	874	534	251	479	246	395
13	115	202	188	614	289	455	762	446	227	450	236	457
14	108	215	184	797	278	424	692	401	212	460	231	431
15	105	208	184	716	269	402	713	482	793	430	366	359
16	103	200	189	617	264	384	736	566	1260	470	435	323
17	104	227	187	523	259	367	676	475	1410	569	422	440
18	105	229	182	452	275	359	600	399	1110	479	367	302
19	105	224	181	405	303	362	548	358	945	479	361	239
20	103	245	174	368	326	363	515	340	1480	972	323	214
21	128	274	172	334	1080	656	491	343	4200	1280	286	205
22	157	274	174	310	1420	981	473	338	4100	1860	262	226
23	149	246	178	295	1160	1580	451	357	2980	2430	256	225
24	141	222	182	282	764	1570	419	558	2280	2010	232	209
25	128	208	184	273	575	1220	388	460	1490	1460	217	234
26	121	199	178	264	495	895	370	355	1020	974	223	430
27	120	459	173	266	460	722	360	303	745	788	284	518
28	118	706	175	262	766	619	342	271	590	651	239	417
29	118	581	181	255	---	564	322	247	549	556	222	473
30	115	438	211	266	---	708	323	231	490	545	223	605
31	123	---	455	286	---	726	---	217	---	548	259	---
TOTAL	7400	8031	6575	13464	12963	23530	25821	13325	29188	27115	10321	9982
MEAN	239	268	212	434	463	759	861	430	973	875	333	333
MAX	1370	706	455	797	1420	1580	3420	597	4200	2430	705	605
MIN	71	154	172	255	259	359	322	217	207	430	217	205
CFSM	.59	66	.52	1.07	1.14	1.87	2.12	1.06	2.40	2.15	.82	.82
IN.	.68	.74	.60	1.23	1.19	2.16	2.37	1.22	2.67	2.48	.95	.91

CAL YR 1988 TOTAL 98344 MEAN 269 MAX 2500 MIN 42 CFSM .66 IN. 9.01
WTR YR 1989 TOTAL 187715 MEAN 514 MAX 4200 MIN 71 CFSM 1.27 IN. 17.20

02414500 TALLAPOOSA RIVER AT WADLEY, AL

LOCATION.--Lat 33°07'00", long 85°33'39", in SE¼SW¼ sec. 12, T. 22 S., R. 10 E., Randolph County, Hydrologic Unit 03150109, on left bank 50 ft upstream from bridge on State Highway 22, 1 mi downstream from Beaver Dam Creek, and at mile 125.3.

DRAINAGE AREA.--1,675 mi^2.

PERIOD OF RECORD.--September 1923 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 599.87 ft above National Geodetic Vertical Datum of 1929. June 17, 1959, to Sept. 30, 1970, nonrecording gage at same site and datum. Prior to June 17, 1959, at site 0.2 mi upstream at datum 1.46 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by several small mill dams above station and since 1982 by Harris Reservoir (station 02412950). Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--66 years, 2,538 ft^3/s, 20.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89,100 ft^3/s, Apr. 14, 1979, gage height, 30.57 ft, present site and datum; minimum daily discharge (regulated), 41 ft^3/s, Aug. 30, 1987; minimum daily discharge (unregulated), 45 ft^3/s, Oct. 2-4, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 20	1415	*23,000	*14.04	June 22	2245	21,000	13.20

Minimum daily discharge, 114 ft^3/s, Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1530	877	2480	1490	597	6670	2960	2970	1730	519	2820	2590
2	3200	1800	2330	1800	201	5520	2200	2850	1170	437	2100	1930
3	1740	1950	422	2890	195	2730	3650	4510	309	2330	2200	442
4	2740	1860	350	3010	197	1560	3480	4340	146	4150	2050	167
5	2660	970	1950	3690	205	2330	12400	2860	1080	9190	1720	1280
6	2650	580	1620	2680	2400	7710	14700	486	2420	9870	824	1960
7	1400	2600	1740	515	2630	3840	12900	287	2900	8060	2340	1970
8	222	2600	395	709	2770	4040	5220	2300	2040	5190	1390	4100
9	253	2870	199	3250	2420	3460	8070	3790	559	4580	1490	1590
10	1260	2200	940	2600	2630	4570	8090	1930	181	5270	1510	328
11	189	1760	213	1030	238	3730	5750	2850	160	3720	1400	1600
12	237	410	2790	978	220	2200	2980	3070	1480	3400	336	2140
13	1370	388	1130	2110	1950	3130	2190	2320	2500	2360	218	3040
14	1800	1710	897	5450	557	3770	3540	593	2700	1750	1290	3470
15	167	2000	395	2740	1030	3720	891	2290	2700	2270	1820	1780
16	249	2920	945	2400	1990	4860	561	2670	5970	596	2060	320
17	1600	2630	1210	2340	3080	2640	843	2230	6150	1990	1980	125
18	2020	1920	673	2230	1250	566	943	2320	5780	2890	1730	118
19	1520	446	1140	1930	230	236	1160	802	3710	3210	388	120
20	385	1390	187	1440	680	2700	2870	1430	11100	4050	210	114
21	3440	2800	194	1590	5550	4960	2850	377	14700	3420	2800	119
22	387	2850	314	1320	5600	1360	518	3900	18300	5330	2930	1660
23	368	3260	345	2430	5190	3030	366	605	16300	7530	2930	437
24	1560	566	413	1680	4360	3150	351	1850	10300	9000	2230	135
25	1240	669	312	211	1910	2970	336	1750	6840	6390	1890	166
26	1630	683	1070	636	305	5250	387	2440	6630	5990	398	249
27	1950	2680	180	1390	3130	3220	838	347	4440	4090	217	1850
28	1420	3370	640	1040	4470	4670	1500	167	2770	4040	1580	2190
29	279	2150	2020	200	---	4910	427	1520	2260	671	1940	1500
30	313	2050	2330	3260	---	7450	283	2620	2590	402	2800	645
31	471	---	2090	3670	---	4580	---	1790	---	3350	2670	---
TOTAL	40250	54959	31914	62709	55985	115532	103254	64264	139915	126045	52261	38135
MEAN	1298	1832	1029	2023	1999	3727	3442	2073	4664	4066	1686	1271
MAX	3440	3370	2790	5450	5600	7710	14700	4510	18300	9870	2930	4100
MIN	167	388	180	200	195	236	283	167	146	402	210	114
CFSM	.78	1.09	.61	1.21	1.19	2.22	2.05	1.24	2.78	2.43	1.01	.76
IN.	.89	1.22	.71	1.39	1.24	2.57	2.29	1.43	3.11	2.80	1.16	.85

CAL YR 1988 TOTAL 467777 MEAN 1278 MAX 20700 MIN 54 MEAN †1280 CFSM †0.76 IN. †10.40
WTR YR 1989 TOTAL 885223 MEAN 2425 MAX 18300 MIN 114 MEAN †2426 CFSM †1.45 IN. †19.66

† Adjustsed for change in contents in Harris Reservoir.

02414500 TALLAPOOSA RIVER AT WADLEY, AL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.38	3.08	4.38	3.76	2.84	6.67	4.82	4.41	3.67	2.90	4.60	4.33
2	4.79	4.00	4.31	3.77	2.33	6.11	4.31	4.74	3.31	2.83	4.07	3.90
3	3.86	4.06	2.67	4.76	2.32	4.68	5.14	5.52	2.48	4.22	4.14	2.70
4	4.46	3.81	2.58	4.85	2.32	3.58	4.77	5.58	2.18	5.37	3.99	2.26
5	4.38	3.26	3.73	5.12	2.34	4.15	9.54	4.60	3.02	7.99	3.78	3.14
6	4.36	2.87	3.56	4.62	4.17	7.27	10.54	2.86	4.26	8.33	3.13	3.83
7	3.61	4.35	3.79	2.81	4.51	5.25	9.80	2.54	4.38	7.41	4.28	3.89
8	2.32	4.35	2.61	2.84	4.57	5.41	5.98	4.14	3.90	5.75	3.46	4.90
9	2.38	4.56	2.29	4.85	4.25	5.03	7.56	5.18	2.80	5.48	3.60	3.67
10	3.45	4.18	3.10	4.47	4.16	5.58	7.48	4.02	2.28	5.83	3.65	2.53
11	2.24	3.72	2.32	3.22	2.43	4.97	6.30	4.58	2.22	4.93	3.54	3.42
12	2.34	2.62	4.33	3.18	2.38	3.90	4.76	4.76	3.23	4.72	2.61	3.99
13	3.53	2.66	3.42	3.91	3.74	4.91	4.28	4.10	4.09	4.33	2.40	4.37
14	3.92	3.67	3.21	6.17	2.68	5.00	5.17	2.89	4.13	3.92	3.30	4.61
15	2.19	3.90	2.60	4.66	3.19	4.92	3.36	3.94	4.60	4.23	3.88	3.76
16	2.37	4.42	3.10	4.44	4.12	5.84	3.02	4.41	6.22	3.05	4.01	2.51
17	3.56	4.32	3.30	4.41	4.81	4.43	3.18	4.08	6.32	3.89	3.94	2.13
18	3.97	4.07	2.89	4.31	3.52	2.86	3.31	4.11	6.00	4.37	3.78	2.10
19	3.52	2.68	3.24	4.10	2.40	2.42	3.39	3.02	5.24	4.56	2.67	2.11
20	2.54	3.30	2.25	3.49	2.76	4.15	4.62	3.36	8.95	5.55	2.38	2.09
21	4.94	4.66	2.26	3.80	6.34	5.96	4.63	2.63	10.56	5.07	4.02	2.10
22	2.58	4.63	2.50	3.42	6.28	3.89	2.90	4.93	12.04	5.91	4.34	3.45
23	2.55	4.85	2.55	4.16	5.96	5.03	2.70	2.89	11.22	7.24	4.31	2.66
24	3.66	2.79	2.63	3.86	5.45	4.99	2.67	3.61	8.43	7.85	3.93	2.16
25	3.35	2.84	2.48	2.36	4.06	4.77	2.64	3.77	6.65	6.43	3.73	2.25
26	3.83	2.93	3.31	2.69	2.57	5.80	2.67	4.02	6.50	6.18	2.67	2.47
27	3.93	4.50	2.24	3.67	4.57	4.90	3.14	2.56	5.32	5.23	2.39	3.56
28	3.44	5.08	2.64	3.21	5.70	5.82	3.65	2.24	4.46	5.06	3.33	4.04
29	2.43	4.21	4.13	2.33	---	5.97	2.75	3.32	4.15	3.10	3.78	3.56
30	2.51	4.19	4.33	4.62	---	7.45	2.53	4.10	4.21	2.78	4.22	3.07
31	2.65	---	4.16	5.19	---	5.79	---	3.69	---	4.62	4.45	---
MEAN	3.32	3.82	3.13	3.97	3.81	5.08	4.72	3.89	5.23	5.13	3.63	3.19
MAX	4.94	5.08	4.38	6.17	6.34	7.45	10.54	5.58	12.04	8.33	4.60	4.90
MIN	2.19	2.62	2.24	2.33	2.32	2.42	2.53	2.24	2.18	2.78	2.38	2.09

WTR YR 1989 MEAN 4.08 MAX 12.04 MIN 2.09

02414715 TALLAPOOSA RIVER NEAR NEW SITE, AL

LOCATION.--Lat 32°58'38", long 85°44'23", in NW¼SW¼SE¼ sec. 15, T. 23 N., R. 23 E., Tallapoosa County, Hydrologic Unit 03150109, on right bank 100 ft downstream from bridge on State Highway 49, 1 mi upstream from Emuckfaw Creek, 5 mi south of New Site, and at mile 95.9.

DRAINAGE AREA.--2,058 mi².

PERIOD OF RECORD.--November 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 528.62 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Feb. 24-27. Records fair except those for period of missing record, which are poor. Flow regulated by Harris Reservoir (station 02412950) and small mill dams above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,300 ft³/s, Sept. 17, 1988, gage height, 12.83 ft; minimum daily discharge, 98 ft³/s, Aug. 31, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 19	0800	22,800	9.81	June 20	2100	*40,800	*12.77

Minimum daily discharge, 269 ft³/s, Sept. 20.

REVISIONS.--The maximum discharge for water year 1988 has been revised to 41,300 ft³/s, Sept. 17, 1988, gage height, 12.83 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	527	973	3330	3230	3180	6110	4620	1060	2300	3390	4330	3020
2	2780	1830	3260	2370	615	7260	3610	4560	2200	1300	3210	3150
3	3620	2330	1910	3850	539	4720	3240	3590	1500	2180	2930	2500
4	2340	1890	634	3720	531	2690	3830	5460	423	4410	2780	508
5	3130	2820	1970	4000	537	2750	14200	3830	411	8370	2780	385
6	3050	2020	2200	3700	1840	8560	17300	3030	2160	12100	2410	1960
7	3010	1590	1830	2310	3490	4360	14000	842	2800	7830	1830	2490
8	1410	2560	1940	748	3610	5700	8330	1610	3250	6220	2660	2450
9	440	3220	542	2270	3510	3910	8070	3060	2680	5950	2240	4500
10	946	3200	661	4230	3030	5130	9350	4240	580	5630	2070	1800
11	1100	2610	1280	2230	1290	3820	8840	2720	454	4830	1950	444
12	407	2250	1970	1670	599	3660	5470	3650	410	4230	1970	2330
13	898	727	2560	2140	1870	3690	3200	2990	2240	4270	567	2610
14	2250	790	1290	5670	1210	3460	3700	3050	2760	3200	536	3430
15	1240	2350	1340	4350	1410	4220	3770	759	3910	2870	2420	3700
16	362	2570	916	3630	2130	5450	2070	3290	7130	3480	2760	2160
17	401	3580	1590	3320	3020	4150	1680	3070	9310	1680	2690	409
18	2180	3750	1300	3140	2890	3170	2380	2770	7280	2920	2630	301
19	2230	1960	1430	2890	1440	729	1410	3020	13500	3620	2280	274
20	1890	827	1150	2250	580	678	2630	619	26400	6740	595	269
21	1570	3130	415	2640	5770	7210	3710	2120	25100	6320	515	322
22	3090	3980	507	1840	6530	3470	3200	1570	11200	6160	3420	842
23	594	3500	588	2810	7070	4830	1100	3660	19100	9110	3330	2530
24	1120	2620	619	2930	e6500	6330	1020	792	11100	9470	3410	480
25	1580	680	676	1310	e2500	3050	949	2710	7930	7620	2670	405
26	2070	1400	826	573	e1000	4590	896	2110	7360	6780	2360	1290
27	1710	1860	858	2010	e1300	5630	1610	2870	6200	5980	542	1470
28	2150	5410	419	1610	5170	5190	1140	501	4930	4530	469	2860
29	1810	3320	2170	1260	---	5430	2100	414	3470	4610	2270	2720
30	463	2770	2790	1400	---	8230	765	2120	3030	1360	2420	2330
31	480	---	3300	4360	---	5910	---	2970	---	1360	3660	---
TOTAL	50848	72517	46271	84461	73161	144087	138190	79057	201118	158520	70704	53939
MEAN	1640	2417	1493	2725	2613	4648	4606	2550	6704	5114	2281	1798
MAX	3620	5410	3330	5670	7070	8560	17300	5460	26400	12100	4330	4500
MIN	362	680	415	573	531	678	765	414	410	1300	469	269
CFSM	.80	1.17	.73	1.32	1.27	2.26	2.24	1.24	3.26	2.48	1.11	.87
IN.	.92	1.31	.84	1.53	1.32	2.60	2.50	1.43	3.64	2.87	1.28	.97

CAL YR 1988 TOTAL 635099 MEAN 1735 MAX 28800 MIN 107 MEAN †1735 CFSM †0.84 IN. †11.49
WTR YR 1989 TOTAL 1172873 MEAN 3213 MAX 26400 MIN 269 MEAN †3214 CFSM †1.56 IN. †21.20

e Estimated

† Adjusted for change in contents in Harris Reservoir.

02415000 HILLABEE CREEK NEAR HACKNEYVILLE, AL

LOCATION.--Lat 33°04'00", long 85°52'45", in NW¼SW¼ sec. 17, T. 24 N., R. 22 E., Tallapoosa County, Hydrologic Unit 03150109, near center of channel on downstream side of county road bridge, 1 mi downstream from Enitachopco Creek, 3 mi east of Hackneyville, and 4 mi upstream from Hackney Creek.

DRAINAGE AREA.--190 mi^2.

PERIOD OF RECORD.--June 1952 to September 1970, October 1970 to September 1972 (flood hydrograph only), October 1985 to current year.

REVISED RECORD.--WDR AL-86-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 557.92 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--22 years (water years 1953-70, 1986-89), 292 ft^3/s, 20.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft^3/s, Apr. 5, 1957, gage height, 25.70 ft; minimum discharge, 4.7 ft^3/s, Aug. 8, 9, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 13, 1979 reached a gage height of 28.10 ft, from floodmarks, discharge, 26,400 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 5	0900	4,980	14.58	June 19	1700	*8,370	*18.77

Minimum daily discharge, 77 ft^3/s, Oct. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	160	196	645	194	395	442	927	123	263	274	289
2	898	119	179	373	188	350	390	536	117	347	260	158
3	520	99	169	396	184	362	366	312	115	1110	254	137
4	289	94	165	440	196	312	605	284	167	1120	235	122
5	202	547	158	317	202	1260	3630	298	332	1570	216	112
6	164	278	154	280	198	2270	1340	383	314	1240	205	109
7	148	205	153	252	393	903	891	265	180	747	195	115
8	136	202	150	234	323	581	692	244	154	581	184	115
9	129	223	146	217	253	449	1130	277	180	467	179	108
10	121	193	142	221	229	376	1190	527	162	403	175	103
11	113	178	149	216	218	336	883	318	136	356	168	105
12	106	164	153	217	207	309	687	259	148	366	165	186
13	95	293	138	462	200	290	586	236	137	656	161	150
14	92	235	134	395	192	276	523	248	135	454	222	113
15	93	205	136	430	187	260	559	356	541	432	501	108
16	89	193	144	347	182	249	490	250	1500	354	261	120
17	91	244	134	293	177	234	434	218	709	344	224	101
18	89	205	127	265	186	231	404	202	334	288	246	94
19	102	188	125	247	193	219	386	198	4880	275	184	90
20	95	309	124	247	202	217	380	203	2480	874	169	89
21	143	278	125	224	1020	1380	353	211	1580	1240	160	292
22	135	220	124	211	541	1370	334	188	1630	846	154	1640
23	96	202	130	204	341	2280	317	289	902	984	147	634
24	88	186	142	198	278	1340	308	220	616	541	139	288
25	81	173	129	192	249	786	293	183	470	469	133	415
26	77	168	117	187	236	583	283	168	376	381	131	518
27	84	439	115	192	231	487	273	160	319	383	149	272
28	79	310	130	183	544	425	261	158	285	331	132	200
29	155	234	145	179	---	394	252	141	346	299	125	192
30	176	211	135	219	---	962	249	135	270	290	122	274
31	120	---	518	231	---	558	---	130	---	335	176	---
TOTAL	4953	6755	4786	8714	7744	20444	18931	8524	19638	18346	6046	7249
MEAN	160	225	154	281	277	659	631	275	655	592	195	242
MAX	898	547	518	645	1020	2280	3630	927	4880	1570	501	1640
MIN	77	94	115	179	177	217	249	130	115	263	122	89
CFSM	.84	1.19	.81	1.48	1.46	3.47	3.32	1.45	3.45	3.11	1.03	1.27
IN.	.97	1.32	.94	1.71	1.52	4.00	3.71	1.67	3.84	3.59	1.18	1.42

CAL YR 1988 TOTAL 82110 MEAN 224 MAX 9550 MIN 15 CFSM 1.18 IN. 16.08
WTR YR 1989 TOTAL 132130 MEAN 362 MAX 4880 MIN 77 CFSM 1.91 IN. 25.87

02418500 TALLAPOOSA RIVER BELOW TALLASSEE, AL

LOCATION.--Lat 32°30'45", long 85°53'21", in SE¼NW¼SE¼ sec. 30, T. 18 N., R. 22 E., Tallapoosa County, Hydrologic Unit 03150110, on left bank, 1.5 mi downstream from Benjamin Fitzpatrick Highway bridge and Thurlow Dam at Tallassee, 3.5 mi upstream from Uphapee Creek, and at mile 48.1.

DRAINAGE AREA.--3,328 mi².

PERIOD OF RECORD.--July 1928 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Nonrecording gage since April 1975. Datum of gage is 164.01 ft above National Geodetic Vertical Datum of 1929 (levels by Alabama Power Co.). July 1928 to March 1975 water-stage recorder.

REMARKS.--No estimated daily discharges. Records fair. Daily discharge computed on basis of powerplant records, flow over spillway, and measured leakage. Flow regulated by Harris Reservoir (station 02413950), Lake Martin (station 02417500), other hydroelectric plants, and small mill dams above station.

COOPERATION.--Records collected by Alabama Power Co., under general supervision of U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--61 years, 4,760 ft³/s, 19.42 in/yr (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 128,000 ft³/s, Feb. 25, 1961, gage height, 50.4 ft, computed on basis of powerplant records and flow over spillway, maximum gage height, 51.35 ft, Mar. 15, 1929; minimum daily discharge, 10 ft³/s, June 3, 1930, May 17, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 70,400 ft³/s, June 20, computed on basis of powerplant records and flow over spillway; minimum daily, 70 ft³/s, for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4580	3830	7930	7950	70	1630	7560	5400	3500	3620	6070	4390
2	7830	3430	7670	7750	1370	820	3510	8270	3430	5350	4440	4050
3	8420	3770	4030	6050	2590	70	4240	6170	70	6620	4180	70
4	7550	3410	2260	6940	70	1560	5000	5510	70	10600	4400	2030
5	8050	5570	2140	6230	70	1430	12600	3150	3260	14400	3740	4220
6	7800	4250	3120	5070	5460	1070	18500	2040	3520	18000	70	4440
7	6450	4880	4990	3940	3480	5950	17400	70	3550	17600	4700	4910
8	1650	5540	5830	70	4080	5840	15200	4260	3960	15000	3040	4450
9	70	5420	5920	4200	3340	2510	16700	4760	1960	9030	3040	2220
10	2980	5250	3800	3620	3160	1970	18600	2560	2050	5600	3390	2100
11	2430	5390	1960	3010	2400	70	16400	2770	70	5530	2360	5060
12	2660	5990	4910	2960	70	70	9350	4340	4220	6010	930	3110
13	3670	4460	3910	3680	1840	1820	7780	3040	4690	5830	70	4060
14	2530	5870	2650	5500	2550	70	5800	1840	5120	7920	2760	3860
15	70	4830	2010	3700	2110	70	4280	4510	6710	5990	3680	3430
16	70	5540	3520	5490	2640	940	70	4030	19400	5330	3610	70
17	2890	5380	2360	5390	2640	600	3130	4030	25700	6000	4050	70
18	3360	5200	70	4530	70	70	3730	4080	15700	3090	4050	2360
19	1900	5410	3270	3460	70	70	4170	4430	55800	3340	70	2520
20	2770	5620	2760	2180	1470	1490	4590	70	70400	5650	70	2670
21	4200	5550	1380	2630	5590	6170	4780	750	41600	8730	5060	2980
22	1690	5870	1650	70	2310	8360	3900	3410	27600	9370	4050	4720
23	70	5480	1580	3550	3240	8460	120	5390	22700	15300	4050	7300
24	4300	3220	1000	3400	2060	11100	3780	3990	19700	16800	4460	7250
25	3000	4520	70	3040	750	11000	2810	3780	15600	11100	4390	4730
26	2640	5310	2370	3390	70	9360	4110	2000	9680	8200	70	7940
27	2850	6510	3050	5070	650	7620	4080	660	7830	7990	70	8100
28	2290	7800	4040	3900	560	6530	70	70	7970	8060	4380	3490
29	1410	7290	4530	70	---	9470	2480	2110	7910	5400	5060	5400
30	70	7970	4280	5450	---	9630	990	2650	6860	3600	5390	4050
31	3370	---	5020	5440	---	8130	---	2820	---	4830	4720	---
TOTAL	103620	158560	104080	127730	54780	123950	205730	102960	400630	259890	100420	116050
MEAN	3343	5285	3357	4120	1956	3998	6858	3321	13350	8384	3239	3868
MAX	8420	7970	7930	7950	5590	11100	18600	8270	70400	18000	6070	8100
MIN	70	3220	70	70	70	70	70	70	70	3090	70	70
CFSM	1.00	1.59	1.01	1.24	.59	1.20	2.06	1.00	4.01	2.52	.97	1.16
IN.	1.16	1.77	1.16	1.43	.61	1.39	2.30	1.15	4.48	2.91	1.12	1.30

CAL YR 1988 TOTAL 926770 MEAN 2532 MAX 16100 MIN 70 MEAN †2253 CFSM †0.77 IN. †10.41
WTR YR 1989 TOTAL 1858400 MEAN 5092 MAX 70400 MIN 70 MEAN †5041 CFSM †1.51 IN. †20.56

† Adjusted for change in Harris Reservoir and Lake Martin.

02419000 UPHAPEE CREEK NEAR TUSKEGEE, AL

LOCATION.--Lat 32°28'36", long 85°41'42", in NE¼NE¼ sec. 12, T. 17 N., R. 23 E., Macon County, Hydrologic Unit 03150110, on left bank at downstream side of bridge on State Highway 81, 1 mi upstream from Red Creek, 1.2 mi upstream from bridge on Western Railway of Alabama, and 4 mi north of Tuskegee.

DRAINAGE AREA.--333 mi².

PERIOD OF RECORD.--October 1939 to September 1970, October 1970 to September 1974 (flood hydrograph only), October 1974 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 223.65 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 2 to Nov. 10, Dec. 31 to Jan. 22, Jan. 30 to Feb. 3, Feb. 21-28, July 17-22, Aug. 13-18, Sept. 6-8. Records good except those for period of estimated record, which are poor. Occasional diurnal fluctuation at low flows caused by small plant above station.

AVERAGE DISCHARGE.--46 years (water years 1940-70, 1975-89), 428 ft³/s, 17.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,200 ft³/s, Apr. 9, 1964, gage height, 28.18 ft; minimum daily discharge, 0.8 ft³/s, Sept. 14, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of about 2 ft higher than that of Apr. 9, 1964, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 5	1000	5,680	12.81	Apr. 10	1700	5,520	12.63
Apr. 6	0900	7,280	14.54	June 16	2000	*8,870	*16.10

Minimum daily discharge, 25 ft³/s, Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	e100	329	e1800	e350	588	1350	388	137	333	202	36
2	e46	e250	269	e2000	e270	627	719	876	129	730	194	105
3	e80	e160	235	e1400	e210	1420	597	577	121	1240	199	119
4	e160	e90	216	e1000	184	1480	721	354	117	2030	198	69
5	e110	e300	207	e600	178	842	4450	293	122	2810	164	51
6	e80	e600	191	e420	187	766	5760	256	232	2310	134	e45
7	e55	e450	179	e370	186	731	2410	227	305	1560	116	e42
8	e45	e300	170	e350	179	582	1140	207	253	1010	99	e39
9	e40	e190	168	e320	164	505	3050	209	555	718	90	37
10	e37	e140	177	e290	152	455	4900	458	557	616	83	38
11	e34	111	180	e260	149	417	3870	566	331	531	80	35
12	e32	101	192	e240	147	393	2290	347	982	427	73	34
13	e30	105	175	e235	147	371	1280	257	1100	409	e66	32
14	e29	111	160	e245	148	349	898	219	494	388	e61	31
15	e28	101	150	e270	145	329	1460	199	1090	476	e80	84
16	e27	96	167	e290	143	506	1990	183	6170	454	e90	90
17	e27	101	174	e260	141	508	1570	164	7290	e350	e105	86
18	e26	104	155	e230	142	412	781	150	2970	e850	e116	92
19	e26	93	143	e200	178	341	649	142	1720	e750	107	60
20	e25	116	136	e230	186	315	616	137	3480	e650	103	44
21	e30	161	134	e220	e600	521	587	135	3920	e900	78	41
22	e70	147	131	e215	e1000	1240	494	138	3200	e750	63	38
23	e55	128	126	186	e1600	2810	434	1150	2120	830	55	94
24	e48	109	129	175	e1000	3360	395	2640	2200	1700	52	169
25	e44	98	125	169	e550	2770	361	1350	1100	1300	49	108
26	e40	95	119	164	e300	1130	328	448	684	532	43	583
27	e37	790	113	164	e250	769	302	287	526	425	40	650
28	e34	1080	120	161	e400	636	274	251	435	386	39	333
29	e32	972	127	155	---	556	250	202	375	307	51	224
30	e31	453	126	e200	---	1540	245	170	335	255	42	189
31	e30	---	e500	e250	---	1980	---	149	---	224	38	---
TOTAL	1440	7652	5523	13069	9286	29249	44171	13129	43050	26251	2910	3598
MEAN	46.5	255	178	422	332	944	1472	424	1435	847	93.9	120
MAX	160	1080	500	2000	1600	3360	5760	2640	7290	2810	202	650
MIN	25	90	113	155	141	315	245	135	117	224	38	31
CFSM	.14	.77	.54	1.27	1.00	2.83	4.42	1.27	4.31	2.54	.28	.36
IN.	.16	.85	.62	1.46	1.04	3.27	4.93	1.47	4.81	2.93	.33	.40

CAL YR 1988 TOTAL 90225 MEAN 247 MAX 3360 MIN 14 CFSM .74 IN. 10.08
WTR YR 1989 TOTAL 199328 MEAN 546 MAX 7290 MIN 25 CFSM 1.64 IN. 22.27

e Estimated

02419890 (NWS 01-8038-N) TALLAPOOSA RIVER NEAR MONTGOMERY, AL

LOCATION.--Lat 32°26'23", long 86°11'44", in NW¼SE¼ sec. 19, T. 17 N., R. 19 E., Montgomery County, Hydrologic Unit 03150110, on left bank at the Clarence T. Perry (City of Montgomery) water purification plant, 2.5 mi above U.S. Highway 231 bridge, 4 mi northeast of Montgomery, and approximately 7 mi above mouth.

DRAINAGE AREA.--4,646 mi².

PERIOD OF RECORD.--October 1972 to current year (gage heights only). August 1966 to December 1970 in files of Geological Survey. May to September 1972 in files of National Weather Service.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 129.13 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Flow is regulated by Harris Reservoir (station 02412950), Lake Martin (station 02417500), and other hydroelectric plants above station.

COOPERATION.--Records provided by National Weather Service.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 37.9 ft, Apr. 15, 1979; minimum gage height, 0.1 ft, Oct. 17, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 26, 1961, reached a stage of 41.9 ft from floodmarks.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 34.75 ft, June 21; minimum gage height, 1.39 ft, Oct. 17.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.81	6.37	10.69	15.64	8.45	5.35	14.27	5.09	7.00	10.07	9.18	8.35
2	8.05	7.03	10.28	16.59	3.38	8.09	13.04	10.70	7.53	11.02	9.59	8.13
3	9.74	6.49	9.62	16.70	4.76	7.95	9.25	10.69	7.30	11.84	9.50	8.02
4	10.84	6.95	7.76	14.78	6.74	7.97	9.23	10.22	2.67	17.43	9.14	2.77
5	10.34	6.91	5.92	12.01	2.90	10.37	14.87	9.30	2.05	17.12	9.03	5.88
6	9.86	9.84	5.62	10.17	2.51	14.14	21.14	7.53	7.28	18.93	8.43	7.92
7	9.29	8.57	6.53	8.31	8.43	13.13	22.95	6.52	7.72	19.76	3.72	8.14
8	8.29	8.66	8.62	7.48	6.73	13.29	22.26	3.36	7.93	18.96	8.68	8.44
9	4.48	8.91	9.16	3.85	7.13	11.60	19.51	7.09	8.07	16.90	7.69	8.06
10	2.33	8.76	9.27	7.15	6.31	9.50	21.22	8.40	6.16	12.09	7.63	5.75
11	6.16	8.64	7.69	6.80	5.99	8.15	22.68	6.82	7.29	10.76	7.86	6.15
12	6.10	8.66	5.67	6.38	5.69	6.80	21.87	7.18	4.58	10.23	6.88	8.43
13	6.47	9.03	8.43	6.71	2.61	5.07	16.85	8.22	9.80	10.18	4.52	7.28
14	7.20	7.89	7.08	8.11	4.53	5.94	13.24	7.64	9.93	10.48	2.71	7.85
15	5.07	8.99	5.84	9.78	5.69	3.30	11.07	5.89	9.78	10.58	7.19	7.57
16	2.07	8.23	5.49	8.34	5.03	3.70	11.10	8.15	16.12	10.25	7.96	7.46
17	1.39	8.84	6.93	8.60	5.94	5.88	7.80	8.19	24.27	10.18	8.18	2.56
18	6.38	8.84	5.75	8.26	6.00	4.78	9.58	8.15	27.79	10.36	8.53	1.87
19	6.85	8.59	2.89	7.29	2.58	3.68	8.35	8.18	24.91	8.36	8.45	5.80
20	5.17	8.91	6.30	6.77	2.33	3.07	8.95	7.99	28.32	8.15	3.34	5.88
21	6.35	9.63	5.99	5.98	4.72	4.78	9.24	2.89	34.75	11.02	2.41	6.03
22	7.26	9.36	4.03	6.13	11.22	12.31	8.76	2.35	34.05	12.21	8.61	6.33
23	4.20	9.20	4.66	3.14	8.78	13.90	8.73	7.55	31.35	13.50	8.12	7.62
24	2.00	8.98	4.85	6.28	8.61	18.57	4.52	10.81	27.35	17.21	8.08	9.25
25	6.97	7.57	3.13	6.30	5.97	18.99	8.61	10.15	23.10	17.62	8.31	8.89
26	5.48	8.31	2.50	6.55	4.40	18.10	7.36	9.17	17.40	14.74	8.28	9.15
27	6.05	9.02	5.26	6.57	3.01	15.00	8.38	6.85	12.52	12.38	2.80	9.89
28	6.27	15.05	6.06	7.75	3.25	11.42	8.53	4.11	11.57	10.90	1.98	9.75
29	5.63	14.40	7.66	6.71	---	10.56	3.77	2.93	11.21	10.27	8.03	9.31
30	4.26	11.86	7.92	2.89	---	12.55	6.89	6.23	11.07	9.38	8.40	8.90
31	1.87	---	8.21	8.34	---	15.25	---	6.87	---	8.52	8.68	---
MEAN	6.07	8.95	6.64	8.27	5.49	9.78	12.47	7.27	14.70	12.63	7.16	7.25
MAX	10.84	15.05	10.69	16.70	11.22	18.99	22.95	10.81	34.75	19.76	9.59	9.89
MIN	1.39	6.37	2.50	2.89	2.33	3.07	3.77	2.35	2.05	8.15	1.98	1.87

CAL YR 1988 MEAN 5.59 MAX 18.10 MIN .84
WTR YR 1989 MEAN 8.89 MAX 34.75 MIN 1.39

MOBILE RIVER MAIN STEM

02419988 (NW 01-5550-06) ALABAMA RIVER AT MONTGOMERY, AL

LOCATION.--Lat 32°23'31", long 86°19'04", in SE¼NE¼SW¼ sec. 1, T. 16 N., R. 17 E., Montgomery County, Hydrologic Unit 03150201, on left bank of river in an abandoned pumping station of the Riverview Manufacturing Co. at 715 Shady St., in Montgomery, 9.3 mi upstream from U.S. Highway 31 bridge.

DRAINAGE AREA.--15,023 mi^2.

PERIOD OF RECORD.--December 1890 to current year (gage heights only). October 1971 to current year in reports of Geological Survey. 1900 to December 1971 in reports of National Weather Service.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 103.30 ft above National Geodetic Vertical Datum of 1929. Prior to July 1, 1970, located 0.4 mi downstream on left bank at foot of Commerce Street at same datum.

REMARKS.--Flow affected by operation of reservoirs on Etowah, Coosa, and Tallapoosa Rivers. (See reservoirs in Mobile River basin.) Stage regulated by Jones Bluff Lock and Dam since January 1972.

COOPERATION.--Records provided by National Weather Service.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 58.1 ft, Feb. 26, 1961, from floodmarks; minimum gage height, -4.0 ft, Sept. 22, 1925.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 43.29 ft, June 23; minimum gage height, 20.60 ft, Feb. 12.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.22	21.53	21.92	26.64	21.81	25.56	24.88	22.03	22.15	23.80	21.88	21.95
2	22.14	21.83	22.21	27.15	21.83	27.24	24.45	22.23	22.30	23.09	22.10	21.78
3	22.04	21.94	22.43	26.09	22.05	26.45	22.87	22.70	22.05	25.72	22.19	21.94
4	22.28	22.37	22.31	26.02	22.34	25.59	22.81	21.91	21.75	27.75	22.42	21.32
5	22.36	22.24	21.85	24.24	21.86	27.21	26.65	21.75	21.65	29.29	21.80	21.77
6	22.14	22.01	22.04	23.59	21.41	31.22	31.81	22.07	21.87	30.24	21.41	21.61
7	22.02	22.33	21.95	22.96	21.89	31.73	32.13	21.73	22.22	30.09	21.93	21.63
8	21.90	21.63	22.23	21.92	21.99	30.65	31.46	22.41	22.05	29.43	21.75	22.01
9	21.60	21.00	22.17	21.94	23.15	29.30	30.71	21.89	21.91	28.34	22.01	22.49
10	21.30	22.09	22.03	22.40	23.11	28.45	31.35	22.12	22.34	27.06	21.86	21.53
11	21.34	22.17	22.02	23.14	21.87	27.57	31.71	21.77	21.99	25.24	22.13	21.90
12	21.54	22.17	21.71	24.66	20.60	27.27	30.80	21.80	22.54	24.39	22.32	21.89
13	21.54	21.60	22.28	25.03	21.71	26.03	29.39	21.90	22.40	23.17	21.83	22.05
14	21.72	21.13	22.23	26.55	21.59	25.21	26.45	21.31	22.41	22.89	21.48	22.12
15	22.21	21.91	21.81	27.62	21.74	24.78	23.59	21.85	22.09	23.59	21.76	22.41
16	21.91	22.29	22.02	27.17	21.93	24.59	22.16	21.56	25.61	23.02	22.18	22.18
17	21.73	22.32	22.39	26.02	21.87	22.43	21.70	21.50	30.69	23.17	22.23	21.98
18	21.76	21.88	22.57	25.45	22.09	21.53	22.73	21.81	32.38	22.84	21.72	21.34
19	21.73	22.25	21.99	24.60	22.04	21.88	21.73	21.87	32.61	22.29	22.10	21.21
20	21.77	22.53	22.46	24.88	21.57	22.12	21.97	21.70	35.05	21.76	22.09	21.41
21	21.90	24.33	22.35	24.30	22.21	23.09	22.43	21.76	37.77	22.79	21.55	21.77
22	22.43	22.64	22.10	21.75	24.85	25.04	22.37	21.21	41.85	23.75	22.26	22.00
23	21.95	22.21	22.06	21.17	25.24	26.18	22.23	21.88	43.29	23.69	22.13	22.09
24	21.47	21.78	22.23	21.35	23.40	27.58	22.25	21.83	41.67	25.25	22.28	21.57
25	21.78	21.97	22.16	22.36	22.65	27.41	21.89	22.55	38.11	26.06	22.28	20.72
26	22.20	21.93	21.69	22.55	21.93	27.35	22.50	22.37	33.09	25.52	22.25	21.75
27	21.90	22.39	21.99	22.29	21.59	25.31	22.29	22.09	28.46	24.26	22.29	22.27
28	21.70	24.69	22.12	21.73	22.85	23.18	22.40	21.97	25.92	22.22	22.17	[illegible]31
29	21.81	23.45	22.41	21.46	---	22.18	21.76	21.64	25.46	21.65	21.99	21.50
30	21.52	22.73	22.48	21.21	---	25.87	21.40	21.67	24.22	21.82	22.00	22.07
31	21.56	---	22.54	22.40	---	27.04	---	21.96	---	21.46	22.38	---
MEAN	21.85	22.24	22.15	23.89	22.26	26.03	25.10	21.90	27.60	24.70	22.02	21.80
MAX	22.43	24.69	22.57	27.62	25.24	31.73	32.13	22.70	43.29	30.24	22.42	22.49
MIN	21.30	21.00	21.69	21.17	20.60	21.53	21.40	21.21	21.65	21.46	21.41	20.72

CAL YR 1988 MEAN 22.05 MAX 30.55 MIN 20.60
WTR YR 1989 MEAN 23.46 MAX 43.29 MIN 20.60

MOBILE RIVER MAIN STEM
02420000 ALABAMA RIVER NEAR MONTGOMERY, AL

LOCATION.--Lat 32°24'41", long 86°24'30", in SW¼NW¼ sec. 31, T. 17 N., R. 17 E., Montgomery County, Hydrologic Unit 03150201, in pier near midstream of bridge on U.S. Highway 31, 4 mi upstream from Autauga Creek, 6 mi northwest of Montgomery, and at mile 287.6.

DRAINAGE AREA.--15,087 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1899 to December 1904 (gage heights only). October 1927 to current year. Published as "at Montgomery" 1899-1903.

REVISED RECORDS.--WSP 1142: 1929. WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder and velocity meter (May 26, 1977). Datum of gage is 97.90 ft National Geodetic Vertical Datum of 1929. January 1899 to December 1903, nonrecording gage at site 9.3 mi upstream at different datum (station 02419988). Since Feb. 18, 1970, auxiliary gage located 3.0 mi downstream on right bank. Mar. 27, 1951 to Feb. 17, 1970 National Weather Service nonrecording gage (station 02419988) used as auxiliary gage.

REMARKS.--Water-discharge records poor. Flow regulated by reservoirs on Etowah, Coosa, and Tallapoosa Rivers. (See Reservoirs in Mobile River basin.) Since January 1972, gage in pool at Robert F. Henry Lock and Dam.

AVERAGE DISCHARGE.--62 years, 23,710 ft³/s, 21.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 283,000 ft³/s, Feb. 26, 1961, maximum gage height, 60.65 ft, Feb. 27, 1961; minimum discharge prior to 1972, 2,180 ft³/s, Nov. 24, 1941, since 1972 negative flows for part of many days; minimum daily discharge (regulated), 255 ft³/s, June 8, 1975, minimum gage height, -2.2 ft, Sept. 26, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1833, 62.7 ft, Apr. 1, 1886, from floodmarks, discharge, 322,000 ft³/s, from rating curve extended above 276,000 ft³/s. Flood of Mar. 30, 1888, reached a stage of 60.6 ft, from floodmarks, discharge, 283,000 ft³/s, from rating curve extended above 276,000 ft³/s. Elevations of floodmarks of both floods referred to National Weather Service gage 9.3 mi upstream and transferred to present site by gage height relation curve.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 176,000 ft³/s, June 23, gage height, 44.80 ft; minimum daily discharge 2,500 ft³/s, Oct. 16; since 1972 negative flows for part of many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16000	7000	25000	50000	16000	50000	40000	15000	10000	30000	16000	14000
2	26000	9000	20000	55000	10000	52000	30000	21000	10000	35000	17000	12000
3	19000	10000	14000	40000	16000	45000	30000	24000	5000	40000	19000	6000
4	17000	20000	9000	35000	8000	52000	32000	23000	2500	60000	22000	8000
5	16000	22000	11000	32000	4000	76000	75000	21000	8000	75000	18000	12000
6	15000	10000	13000	30000	21000	88000	90000	20000	14000	80000	14000	12000
7	11000	16000	15000	25000	26000	90000	90000	24000	16000	85000	11000	13000
8	4500	15000	14000	20000	30000	80000	70000	25000	17000	70000	10000	12000
9	3500	12000	14000	22000	32000	72000	75000	24000	15000	50000	9000	10000
10	6000	16000	11000	24000	30000	66000	80000	23000	12000	40000	8000	10000
11	7000	17000	6000	35000	20000	60000	75000	22000	8000	38000	7000	12000
12	8000	8500	15000	38000	10000	55000	60000	20000	14000	34000	5000	11000
13	8000	14000	17000	45000	12000	50000	50000	16000	18000	30000	3000	12000
14	8000	13000	10000	60000	11000	40000	40000	10000	20000	33000	7000	11000
15	4000	17000	7000	65000	17000	36000	32000	16000	34000	30000	11000	12000
16	2500	19000	10000	60000	15000	32000	24000	15000	80000	31000	15000	5000
17	6000	20000	8000	50000	17000	30000	18000	14000	90000	30000	17000	3000
18	8000	18000	5000	45000	10000	20000	25000	18000	100000	30000	14000	8000
19	7500	15000	10000	38000	4000	13000	20000	18000	120000	29000	5000	9000
20	8000	24000	8500	33000	18000	20000	19000	9000	140000	28000	5000	10000
21	16000	33000	8000	30000	35000	35000	17000	5000	155000	33000	6000	12000
22	7000	31000	9000	20000	45000	42000	12000	10000	170000	35000	12000	17000
23	3000	29000	6000	14000	40000	50000	5000	17000	176000	40000	13000	15000
24	8000	21000	4000	13000	35000	55000	11000	18000	165000	45000	13000	11000
25	8500	16000	7000	14500	25000	55000	11000	14000	130000	40000	12000	20000
26	8500	15000	10000	16000	18000	45000	13000	11000	80000	35000	4500	22000
27	8000	27000	15000	18000	25000	35000	13000	5000	50000	30000	11000	23000
28	7500	32000	17000	10000	35000	25000	11000	4000	45000	25000	13000	24000
29	4000	30000	19000	6000	---	30000	5000	8000	40000	15000	14000	26000
30	2500	28000	22000	18000	---	45000	6000	10000	35000	10000	16000	28000
31	6500	---	32000	26000	---	50000	---	11000	---	14000	16000	---
TOTAL	280500	564500	391500	987500	585000	1494000	1079000	491000	1779500	1200000	363500	400000
MEAN	9048	18820	12630	31850	20890	48190	35970	15840	59320	38710	11730	13330
MAX	26000	33000	32000	65000	45000	90000	90000	25000	176000	85000	22000	28000
MIN	2500	7000	4000	6000	4000	13000	5000	4000	2500	10000	3000	3000
CFSM	.60	1.25	.84	2.11	1.38	3.19	2.38	1.05	3.93	2.57	.78	.88
IN.	.69	1.39	.97	2.43	1.44	3.68	2.66	1.21	4.39	2.96	.90	.99

CAL YR 1988 TOTAL 4287300 MEAN 11710 MAX 80000 MIN 1800 MEAN †11730 CFSM †0.78 IN. †10.58
WTR YR 1989 TOTAL 9616000 MEAN 26350 MAX 176000 MIN 2500 MEAN †26540 CFSM †1.76 IN. †23.88

† Adjusted for change in contents in Allatoona Reservoir, Weiss Lake, H. Neely Henry Reservoir, Logan Martin Reservoir, combined Lay, Mitchell, and Jordan Lakes, Harris Reservoir, and Lake Martin.

MOBILE RIVER MAIN STEM

02420000 ALABAMA RIVER NEAR MONTGOMERY, AL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1969 to September 1973, September 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to September 1981.
WATER TEMPERATURE: July 1975 to September 1981.

REMARKS.--Miscellaneous samples of chemical data published for water years 1968-69.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: (July 1975-September 1977, 1980) Maximum, 176 microsiemens, Sept. 30, 1977; minimum, 46 microsiemens, Apr. 3, 1977.
WATER TEMPERATURE: (July 1975-September 1977, 1980-81) Maximum, 31.5°C Aug. 12-14, 1977; minimum, 2.5°C, Jan. 20-21, Feb. 3, 1977.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT												
17...	1115	--	3500	97	128	7.40	21.5	3.7	764	8.6	97	75
MAR												
03...	0940	16.0	44700	--	--	--	--	--	--	--	--	--
03...	0945	32.0	44700	--	--	--	--	--	--	--	--	--
03...	0955	48.0	44700	--	--	--	--	--	--	--	--	--
03...	1000	64.0	44700	--	--	--	--	--	--	--	--	--
03...	1005	80.0	44700	--	--	--	--	--	--	--	--	--
03...	1030	--	44000	134	139	7.40	10.0	9.3	755	10.6	95	410
05...	1420	16.0	73600	--	--	--	--	--	--	--	--	--
05...	1430	32.0	73600	--	--	--	--	--	--	--	--	--
05...	1440	48.0	73600	--	--	--	--	--	--	--	--	--
05...	1450	64.0	73600	--	--	--	--	--	--	--	--	--
05...	1520	80.0	73600	--	--	--	--	--	--	--	--	--
07...	0935	16.0	90400	--	--	--	--	--	--	--	--	--
07...	0945	32.0	90400	--	--	--	--	--	--	--	--	--
07...	0950	48.0	90400	--	--	--	--	--	--	--	--	--
07...	1000	64.0	90400	--	--	--	--	--	--	--	--	--
07...	1020	80.0	90400	--	--	--	--	--	--	--	--	--
08...	1340	16.0	78800	--	--	--	--	--	--	--	--	--
08...	1345	32.0	78800	--	--	--	--	--	--	--	--	--
08...	1355	48.0	78800	--	--	--	--	--	--	--	--	--
08...	1400	64.0	78800	--	--	--	--	--	--	--	--	--
08...	1410	80.0	78800	--	--	--	--	--	--	--	--	--
09...	1410	16.0	73600	--	--	--	--	--	--	--	--	--
09...	1417	32.0	73600	--	--	--	--	--	--	--	--	--
09...	1430	48.0	73600	--	--	--	--	--	--	--	--	--
09...	1440	64.0	73600	--	--	--	--	--	--	--	--	--
09...	1503	80.0	73600	--	--	--	--	--	--	--	--	--
APR												
06...	1215	16.0	89400	--	--	--	--	--	--	--	--	--
06...	1220	32.0	89400	--	--	--	--	--	--	--	--	--
06...	1230	48.0	89400	--	--	--	--	--	--	--	--	--
06...	1240	64.0	89400	--	--	--	--	--	--	--	--	--
06...	1250	80.0	89400	--	--	--	--	--	--	--	--	--
10...	1130	--	89500	80	85	7.00	15.0	16	763	8.9	88	560
AUG												
14...	1230	--	3000	--	89	7.60	28.0	3.5	757	9.2	118	92
14...	1235	25.0	--	--	--	--	--	--	--	--	--	--
14...	1245	50.0	--	--	--	--	--	--	--	--	--	--
14...	1300	75.0	--	--	--	--	--	--	--	--	--	--

MOBILE RIVER MAIN STEM

02420000 ALABAMA RIVER NEAR MONTGOMERY, AL--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT											
17...	2	41	3	11	3.3	8.9	31	0.6	1.8	0	46
MAR											
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
03...	240	53	9	15	3.7	7.1	22	.4	1.5	0	55
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
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APR											
06...	--	--	--	--	--	--	--	--	--	--	--
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06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
10...	260	33	5	8.9	2.5	3.8	19	.3	1.4	0	32
AUG											
14...	K2	32	2	8.7	2.4	4.0	21	.3	1.4	0	36
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--

02420000 ALABAMA RIVER NEAR MONTGOMERY, AL--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	PH LAB (STAND- ARD UNITS)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT											
17...	38	7.60	38	11	8.6	0.10	6.8	79	75	0.11	747
MAR											
03...	--	--	--	--	--	--	--	--	--	--	--
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03...	--	--	--	--	--	--	--	--	--	--	--
03...	45	8.00	44	14	6.1	.10	5.5	90	81	.12	10700
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
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APR											
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06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
10...	26	7.70	28	6.2	3.6	.10	6.5	54	51	.07	13000
AUG											
14...	30	7.70	30	5.0	4.0	.10	7.2	61	51	.08	494
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--

MOBILE RIVER MAIN STEM

02420000 ALABAMA RIVER NEAR MONTGOMERY, AL--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)
OCT											
17...	--	<.010	0.200	0.020	<.010	0.48	0.50	0.030	0.030	<.010	0.03
MAR											
03...	--	--	--	--	--	--	--	--	--	--	--
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03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
03...	.320	.010	.330	.070	.040	.33	.40	.060	.030	.020	.06
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
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APR											
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06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
10...	--	<.010	.220	.050	.040	.35	.40	.060	.020	<.010	.06
AUG											
14...	--	<.010	<.100	.030	.030	2.6	2.6	.040	<.010	<.010	.04
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--

MOBILE RIVER MAIN STEM

02420000 ALABAMA RIVER NEAR MONTGOMERY, AL--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
OCT											
17...	0.03	10	1	30	<.5	<1	1	<3	2	53	<5
MAR											
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
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03...	--	--	--	--	--	--	--	--	--	--	--
03...	.01	60	1	30	<.5	15	1	<3	3	160	<5
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
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05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
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09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
10...	.02	50	1	27	<.5	4	2	<3	5	160	<5
AUG											
14...	--	20	1	26	<.5	<1	<1	<3	<1	99	<1
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--

MOBILE RIVER MAIN STEM

02420000 ALABAMA RIVER NEAR MONTGOMERY, AL--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDED (MG/L)
OCT											
17...	<4	1	<.1	<10	<1	<1	<1.0	41	<6	6	3
MAR											
03...	--	--	--	--	--	--	--	--	--	--	5
03...	--	--	--	--	--	--	--	--	--	--	6
03...	--	--	--	--	--	--	--	--	--	--	8
03...	--	--	--	--	--	--	--	--	--	--	5
03...	--	--	--	--	--	--	--	--	--	--	5
03...	<4	7	<.1	<10	2	<1	<1.0	49	<6	8	19
05...	--	--	--	--	--	--	--	--	--	--	43
05...	--	--	--	--	--	--	--	--	--	--	41
05...	--	--	--	--	--	--	--	--	--	--	47
05...	--	--	--	--	--	--	--	--	--	--	49
05...	--	--	--	--	--	--	--	--	--	--	53
07...	--	--	--	--	--	--	--	--	--	--	40
07...	--	--	--	--	--	--	--	--	--	--	38
07...	--	--	--	--	--	--	--	--	--	--	38
07...	--	--	--	--	--	--	--	--	--	--	44
07...	--	--	--	--	--	--	--	--	--	--	52
08...	--	--	--	--	--	--	--	--	--	--	32
08...	--	--	--	--	--	--	--	--	--	--	32
08...	--	--	--	--	--	--	--	--	--	--	32
08...	--	--	--	--	--	--	--	--	--	--	39
08...	--	--	--	--	--	--	--	--	--	--	48
09...	--	--	--	--	--	--	--	--	--	--	32
09...	--	--	--	--	--	--	--	--	--	--	25
09...	--	--	--	--	--	--	--	--	--	--	21
09...	--	--	--	--	--	--	--	--	--	--	29
09...	--	--	--	--	--	--	--	--	--	--	35
APR											
06...	--	--	--	--	--	--	--	--	--	--	36
06...	--	--	--	--	--	--	--	--	--	--	38
06...	--	--	--	--	--	--	--	--	--	--	43
06...	--	--	--	--	--	--	--	--	--	--	43
06...	--	--	--	--	--	--	--	--	--	--	60
10...	<4	7	<.1	<10	2	<1	<1.0	30	<6	17	50
AUG											
14...	<4	<1	<.1	<10	<1	<1	<1.0	34	<6	16	8
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--

MOBILE RIVER MAIN STEM

02420000 ALABAMA RIVER NEAR MONTGOMERY, AL--Continued

(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
OCT											
17...	28	99	--	--	--	--	--	--	--	--	--
MAR											
03...	579	--	--	--	--	--	--	--	--	--	--
03...	784	--	--	--	--	--	--	--	--	--	--
03...	1030	--	--	--	--	--	--	--	--	--	--
03...	664	--	--	--	--	--	--	--	--	--	--
03...	664	--	--	--	--	--	--	--	--	--	--
03...	2220	3	--	--	--	--	--	--	--	--	--
05...	8470	--	--	--	--	--	--	--	--	--	--
05...	8250	--	--	--	--	--	--	--	--	--	--
05...	9420	--	--	--	--	--	--	--	--	--	--
05...	9740	--	--	--	--	--	--	--	--	--	--
05...	10500	--	--	--	--	--	--	--	--	--	--
07...	9760	--	--	--	--	--	--	--	--	--	--
07...	9280	--	--	--	--	--	--	--	--	--	--
07...	9280	--	--	--	--	--	--	--	--	--	--
07...	10700	--	--	--	--	--	--	--	--	--	--
07...	12700	--	--	--	--	--	--	--	--	--	--
08...	6910	--	--	--	--	--	--	--	--	--	--
08...	6810	--	--	--	--	--	--	--	--	--	--
08...	6810	--	--	--	--	--	--	--	--	--	--
08...	8300	--	--	--	--	--	--	--	--	--	--
08...	10200	--	--	--	--	--	--	--	--	--	--
09...	6360	--	--	--	--	--	--	--	--	--	--
09...	4970	--	--	--	--	--	--	--	--	--	--
09...	4170	--	--	--	--	--	--	--	--	--	--
09...	5760	--	--	--	--	--	--	--	--	--	--
09...	6960	--	--	--	--	--	--	--	--	--	--
APR											
06...	8810	--	--	--	--	--	--	--	--	--	--
06...	9100	--	--	--	--	--	--	--	--	--	--
06...	10300	--	--	--	--	--	--	--	--	--	--
06...	10500	--	--	--	--	--	--	--	--	--	--
06...	14500	--	--	--	--	--	--	--	--	--	--
10...	12100	79	--	--	--	--	--	--	--	--	--
AUG											
14...	65	96	--	--	--	--	--	--	--	--	--
14...	--	--	0	1	4	9	16	22	29	41	80
14...	--	--	0	0	1	30	97	100	100	100	100
14...	--	--	1	4	37	98	99	100	100	100	100

02421000 CATOMA CREEK NEAR MONTGOMERY, AL

LOCATION.--Lat 32°18'26", long 86°17'58", in SE¼NW¼ sec. 6, T. 15 N., R. 18 E., Montgomery County, Hydrologic Unit 03150201, on right bank on downstream side of bridge on old U.S. Highway 331, 5 mi south of Montgomery.

DRAINAGE AREA.--290 mi^2.

PERIOD OF RECORD.--June 1952 to September 1971, October 1971 to September 1974 (flood hydrograph only), October 1974 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 151.02 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1, Oct. 10 to Nov. 4, Aug. 5-8. Records good except for periods of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--34 years (water years 1953-71, 1975-89), 364 ft^3/s, 17.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,600 ft^3/s, Feb. 25, 1961, gage height, 28.65 ft; no flow for many days in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 28, 1948, reached a stage of 27.5 ft at present site and datum; discharge, 38,300 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	2100	8,210	21.45	June 17	1600	11,000	23.01
Apr. 6	2300	6,870	20.35	June 21	0900	*18,400	*24.87

Minimum daily discharge, 4.1 ft^3/s, Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e110	e6.9	397	6590	230	690	1580	332	17	866	83	64
2	600	e6.8	187	6870	153	1230	1070	1220	16	1610	83	28
3	1160	e6.7	133	3720	114	2060	235	728	15	2410	70	24
4	1460	e100	104	959	91	1410	478	238	15	2250	63	15
5	1070	1030	86	289	91	1100	3130	114	92	2730	e50	7.2
6	461	599	74	199	82	1600	5160	79	100	2970	e37	5.8
7	141	174	66	162	84	951	5480	57	151	2090	e28	5.3
8	89	97	58	140	79	491	2280	42	200	1660	e22	4.8
9	58	92	56	125	67	237	2260	35	212	694	19	4.9
10	e45	82	48	114	56	171	3520	55	313	767	17	4.7
11	e40	97	80	101	48	138	3490	33	209	715	15	4.4
12	e30	60	107	95	43	119	2450	56	368	416	14	9.5
13	e20	104	105	93	40	104	1160	40	314	497	13	50
14	e15	82	96	119	39	95	353	29	154	352	27	13
15	e10	68	76	617	39	87	406	23	1550	482	25	10
16	e8.5	85	122	538	38	176	898	20	5380	437	195	8.2
17	e8.0	150	110	262	37	162	732	19	10000	411	331	5.9
18	e7.5	121	102	160	48	134	298	18	8500	409	59	5.0
19	e7.0	100	85	122	71	99	175	16	5220	296	33	4.4
20	e11	597	67	125	92	83	138	15	8220	495	19	5.2
21	e30	464	58	133	1740	504	114	15	16000	2240	15	4.7
22	e18	211	49	123	2280	1540	102	19	8130	1710	16	11
23	e11	126	45	105	1680	2920	88	357	4280	488	12	13
24	e9.0	81	47	88	872	3570	80	170	1280	664	9.9	4.1
25	e10	60	40	78	210	4030	67	129	443	769	9.1	55
26	e8.5	53	35	71	148	2330	59	74	245	340	8.3	11
27	e8.0	2120	32	69	124	443	54	88	151	156	7.6	6.9
28	e7.7	3540	38	64	321	241	48	63	119	107	7.0	12
29	e7.4	2810	34	59	---	232	86	42	153	84	6.3	14
30	e7.2	1400	82	166	---	1930	59	21	672	70	5.9	58
31	e7.0	---	2730	343	---	2130	---	18	---	70	88	---
TOTAL	5474.8	14523.4	5350	22699	8917	31007	36050	4165	72519	29255	1388.1	469.0
MEAN	177	484	173	732	318	1000	1202	134	2417	944	44.8	15.6
MAX	1460	3540	2730	6870	2280	4030	5480	1220	16000	2970	331	64
MIN	7.0	6.7	32	59	37	83	48	15	15	70	5.9	4.1
CFSM	.61	1.67	.60	2.52	1.10	3.45	4.14	.46	8.34	3.25	.15	.05
IN.	.70	1.86	.69	2.91	1.14	3.98	4.62	.53	9.30	3.75	.18	.06

CAL YR 1988 TOTAL 98065.1 MEAN 268 MAX 3840 MIN 3.0 CFSM .92 IN. 12.58
WTR YR 1989 TOTAL 231817.3 MEAN 635 MAX 16000 MIN 4.1 CFSM 2.19 IN. 29.74

e Estimated

MOBILE RIVER MAIN STEM

02421351 ALABAMA RIVER BELOW ROBERT F. HENRY LOCK AND DAM, NEAR BENTON, AL

LOCATION.--Lat 32°19'38", long 86°47'08", in SW¼NE¼ sec. 32, T. 16 N., R. 13 E., Lowndes County, Hydrologic Unit 03150201, at downstream end of Robert F. Henry Lock and Dam, 2 mi upstream from Big Swamp Creek, 2.5 mi northeast of Benton, 5 mi downstream from Ivy Creek, and at mile 245.4.

DRAINAGE AREA.--16,233 mi².

PERIOD OF RECORD.--January 1972 to current year (elevations only). Prior to October 1983, published as Alabama River below Jones Bluff Lock and Dam, near Benton.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum elevation, 133.0 ft, Apr. 18, 1979; minimum, 78.0 ft, Nov. 7, 1978.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum elevation, 124.8 ft, June 23; minimum, 79.0 ft, May 29.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80.10	80.60	84.80	99.80	82.20	95.60	99.90	79.90	79.60	95.90	79.90	80.10
2	90.00	80.80	82.40	104.10	80.50	98.90	97.10	82.80	79.70	92.00	82.10	80.00
3	82.10	81.90	82.20	102.80	80.00	102.10	92.30	82.40	79.90	95.60	82.80	80.00
4	83.50	80.20	79.60	99.00	81.20	98.60	88.90	83.40	80.30	100.90	89.50	79.70
5	80.40	90.70	80.60	95.90	80.40	97.40	96.50	81.80	79.80	104.80	87.30	79.30
6	81.40	80.90	80.40	92.40	81.20	105.40	108.40	81.20	79.50	106.10	82.20	79.60
7	79.50	80.50	82.10	90.90	87.80	109.10	110.30	90.30	79.70	107.00	80.50	79.30
8	79.40	81.10	82.20	90.20	87.80	107.90	110.80	85.60	80.20	105.20	80.30	80.10
9	79.30	79.80	81.50	82.20	91.00	106.00	107.50	83.50	80.90	104.00	80.00	80.10
10	80.00	79.60	80.00	82.70	91.00	103.50	109.10	82.70	80.00	101.00	80.10	80.70
11	79.70	80.20	79.60	90.20	90.90	100.60	110.20	83.40	80.10	98.20	80.30	80.40
12	79.70	79.80	80.40	92.00	81.50	100.10	110.10	83.00	79.90	94.50	80.60	79.80
13	80.30	82.50	81.70	94.30	81.30	98.90	102.70	80.10	79.90	92.00	80.60	80.10
14	80.60	81.80	81.40	97.80	80.10	95.10	102.70	80.10	80.90	92.00	80.00	80.20
15	80.30	80.30	80.10	100.30	80.20	94.70	96.70	79.80	82.80	92.00	80.60	80.20
16	79.70	80.30	80.20	101.10	81.30	94.10	92.20	80.70	95.60	91.90	80.10	79.90
17	79.70	81.70	80.10	99.80	81.50	91.70	82.90	79.90	104.70	91.90	82.20	79.60
18	79.90	84.50	80.30	96.70	80.10	82.80	87.40	79.90	109.60	91.30	81.10	79.10
19	80.10	80.20	81.60	95.60	80.20	80.40	90.10	81.00	111.30	91.30	80.10	79.30
20	80.70	80.40	80.10	95.80	80.20	79.60	81.10	80.40	113.60	81.80	80.30	79.30
21	80.70	95.80	80.00	92.80	88.90	90.20	84.30	79.80	116.10	87.90	80.20	79.20
22	80.00	90.70	80.10	91.40	93.30	95.00	80.10	79.70	121.50	92.60	80.30	79.50
23	80.50	91.30	80.00	81.70	96.80	98.90	79.90	80.00	124.80	91.70	80.20	81.20
24	81.00	85.00	80.50	79.90	96.10	101.90	79.50	84.50	124.70	95.30	80.10	80.80
25	81.70	80.70	80.00	81.60	92.20	102.30	79.60	80.40	122.00	97.70	80.20	79.70
26	80.30	80.30	80.70	81.00	91.60	101.00	79.90	80.80	116.10	97.40	80.20	81.20
27	80.20	86.70	81.00	82.80	81.30	100.50	80.10	79.70	107.60	95.00	80.40	80.10
28	80.70	95.90	80.50	80.40	89.90	92.80	80.00	79.70	99.90	88.20	79.70	87.00
29	80.60	94.80	80.10	80.00	---	86.70	80.00	79.00	96.90	85.80	79.90	84.50
30	81.00	93.90	82.60	81.00	---	95.00	80.10	79.20	94.90	80.30	79.90	86.20
31	80.60	---	89.90	86.30	---	102.00	---	79.30	---	79.80	80.00	---
MEAN	80.76	84.10	81.18	91.05	85.37	97.06	92.68	81.42	95.42	94.23	81.02	80.54
MAX	90.00	95.90	89.90	104.10	96.80	109.10	110.80	90.30	124.80	107.00	89.50	87.00
MIN	79.30	79.60	79.60	79.90	80.00	79.60	79.50	79.00	79.50	79.80	79.70	79.10

CAL YR 1988 MEAN 82.06 MAX 107.70 MIN 78.90
WTR YR 1989 MEAN 87.07 MAX 124.80 MIN 79.00

02422500 MULBERRY CREEK AT JONES, AL

LOCATION.--Lat 32°34'58", long 86°54'13", in NW¼SE¼ sec. 31, T. 19 N., R. 12 E., Dallas County, Hydrologic Unit 03150201, on right bank 75 ft downstream from highway bridge, 0.4 mi west of Jones, 6 mi upstream from Buck Creek, and 11 mi upstream from mouth.

DRAINAGE AREA.--203 mi^2.

PERIOD OF RECORD.--October 1938 to September 1970, October 1970 to September 1974 (flood hydrograph only), October 1974 to current year. Prior to October 1959, published as Mulberry "River" at Jones.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 165.23 ft above National Geodetic Vertical Datum of 1929. Prior to June 2, 1939, nonrecording gage at site 50 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Aug. 24 to Sept. 30. Records good except for periods of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--47 years (water years 1939-70, 1975-89), 313 ft^3/s, 20.94 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,800 ft^3/s, Aug. 16, 1939, gage height, 30.38 ft; minimum daily discharge, 27 ft^3/s, Oct. 6, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 33.6 ft in April 1938, from information by local residents, discharge, 48,000 ft^3/s, from rating curve extended above 30,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 6	1100	*7,620	*13.54	June 21	0600	5,100	10.34
June 19	1500	4,150	9.07				

Minimum discharge, 67 ft^3/s, Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	128	158	1360	230	306	545	187	95	408	147	e150
2	842	118	151	551	210	280	409	207	92	1020	130	e120
3	300	103	145	406	203	393	363	167	92	1120	128	e150
4	189	104	143	370	223	351	429	158	121	527	137	e130
5	140	391	140	304	222	2050	2440	179	129	437	135	e110
6	120	252	137	286	222	5930	900	174	152	482	117	e100
7	110	152	137	270	370	1420	610	153	141	399	112	e96
8	104	140	137	255	358	730	461	141	118	320	110	e93
9	99	177	137	238	255	560	1900	143	146	345	105	e90
10	97	154	137	255	223	456	1850	188	133	308	103	e87
11	94	216	144	267	216	399	1220	197	109	250	101	e84
12	90	188	147	265	209	354	770	149	174	221	101	e90
13	84	682	135	417	203	320	540	139	143	243	99	e110
14	81	381	131	373	201	296	461	179	220	254	105	e95
15	81	242	132	520	195	272	456	491	314	247	127	e90
16	82	209	169	395	188	251	415	240	805	215	123	e85
17	81	563	154	305	188	232	352	169	398	195	202	e80
18	80	315	135	270	189	223	319	147	202	177	142	e75
19	80	233	129	258	203	211	297	146	2100	167	112	e72
20	82	523	126	282	229	203	276	144	1610	173	102	e70
21	174	487	124	248	377	1800	254	146	3300	203	97	e68
22	182	284	125	227	335	1650	242	138	1230	184	93	e68
23	121	230	147	217	228	1000	226	173	1560	198	91	e67
24	106	202	213	210	195	690	213	230	1250	261	e87	e70
25	100	183	373	203	187	479	201	153	660	218	e85	e100
26	96	175	199	198	190	399	192	131	469	176	e83	e85
27	95	272	160	201	195	345	185	119	394	169	e82	e150
28	91	252	163	195	308	303	175	111	354	158	e90	e130
29	90	184	171	188	---	315	170	103	558	142	e84	e110
30	89	168	169	259	---	2350	167	100	438	136	e80	e170
31	94	---	1450	326	---	940	---	97	---	139	e220	---
TOTAL	4289	7708	6118	10119	6552	25508	17038	5199	17507	9492	3530	2995
MEAN	138	257	197	326	234	823	568	168	584	306	114	99.8
MAX	842	682	1450	1360	377	5930	2440	491	3300	1120	220	170
MIN	80	103	124	188	187	203	167	97	92	136	80	67
CFSM	.68	1.27	.97	1.61	1.15	4.05	2.80	.83	2.87	1.51	.56	.49
IN.	.79	1.41	1.12	1.85	1.20	4.67	3.12	.95	3.21	1.74	.65	.55

CAL YR 1988 TOTAL 66947 MEAN 183 MAX 2320 MIN 35 CFSM .90 IN. 12.27
WTR YR 1989 TOTAL 116055 MEAN 318 MAX 5930 MIN 67 CFSM 1.57 IN. 21.27

e Estimated

MOBILE RIVER MAIN STEM

02423000 ALABAMA RIVER AT SELMA, AL

LOCATION.--Lat 32°24'20", long 87°01'07", in SE¼NW¼SE¼ sec. 36, T. 17 N., R. 10 E., Dallas County, Hydrologic Unit 03150201, in first pier from right bank of Edmund Pettus Bridge on U.S. Highway 80, in Selma, 1 mi upstream from Valley Creek, and at mile 214.8.

DRAINAGE AREA.--17,095 mi^2.

PERIOD OF RECORD.--January to December 1899 (gage heights only), January 1900 to December 1913, and June 1928 to September 1970. October 1971 to current year (gage heights only). Gage-height records December 1890 to December 1971 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 61.80 ft above National Geodetic Vertical Datum of 1929. Prior to June 22, 1928, nonrecording gage, June 22, 1928 to Apr. 11, 1938, water-stage recorder, and Apr. 12, 1938 to May 22, 1940, nonrecording gage at site 300 ft upstream at same datum.

REMARKS.--Records good. Flow affected by operation of reservoirs on Etowah, Coosa, Tallapoosa, and Alabama Rivers. (See Reservoirs in Mobile River basin.) Stage affected by Millers Ferry Lock and Dam since November 1968.

AVERAGE DISCHARGE.--55 years (water years 1901-13, 1929-70), 26,170 ft^3/s, 20.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 284,000 ft^3/s, Mar. 1, 1961, gage height, 57.97 ft; minimum discharge observed, 2,660 ft^3/s, Nov. 1, 1904, gage height, -2.20 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 8, 1886, reached a stage of 57.0 ft (discharge, 248,000 ft^3/s), present site and datum, from floodmarks established by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 48.0 ft, June 24; minimum gage height, 17.18 ft, Oct. 9.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.47	18.84	21.65	27.69	20.30	24.17	27.35	19.12	18.71	23.84	19.04	19.50
2	20.91	19.04	20.80	30.73	19.18	27.03	25.12	20.13	19.05	23.11	19.46	19.28
3	20.11	19.22	19.81	29.65	19.59	28.89	22.95	20.05	18.85	26.13	19.66	19.13
4	20.30	19.70	18.17	26.83	19.23	26.96	21.87	20.70	18.33	29.73	19.98	18.54
5	19.76	21.51	18.54	24.65	19.21	27.46	27.35	---	18.35	32.61	19.82	18.55
6	19.66	19.16	18.45	22.94	20.39	32.64	34.32	---	18.73	33.73	19.49	18.84
7	18.95	19.82	19.04	22.06	21.02	35.27	36.17	---	19.31	33.90	19.40	19.07
8	18.21	19.82	19.75	21.95	21.52	34.44	36.02	---	19.66	32.68	19.29	19.07
9	17.87	18.88	19.62	20.33	21.94	32.97	34.43	---	19.93	31.22	19.21	19.25
10	17.85	19.06	19.19	19.62	21.95	30.85	35.58	---	19.49	28.86	19.14	18.80
11	17.90	19.38	18.46	21.08	21.97	28.32	36.39	20.66	19.17	26.08	19.14	18.86
12	17.98	18.87	18.79	22.96	19.27	27.67	35.75	20.17	19.56	23.77	19.01	19.13
13	18.20	19.67	19.23	24.07	19.24	26.58	33.26	19.74	19.81	22.85	19.10	19.41
14	18.37	19.88	19.30	25.89	19.21	24.68	29.33	18.91	20.11	22.69	18.96	19.36
15	18.31	19.73	18.84	28.17	19.94	23.76	25.03	19.35	20.41	22.91	19.09	19.58
16	18.06	19.82	19.06	28.64	19.44	23.16	22.81	19.28	24.56	22.73	19.47	18.78
17	17.92	20.42	19.18	27.00	19.68	22.30	20.65	19.04	31.26	22.61	20.15	18.27
18	18.27	20.67	19.04	25.30	19.43	20.63	20.78	19.35	34.86	22.12	20.14	18.12
19	18.56	19.51	18.96	24.03	18.98	19.04	22.03	19.71	36.47	22.21	19.33	18.21
20	18.80	20.36	18.96	23.72	19.93	18.96	19.93	19.15	38.56	20.68	18.77	18.23
21	19.55	23.58	19.04	23.10	21.04	20.61	19.62	18.65	40.99	21.42	18.50	18.49
22	19.10	22.63	19.01	22.19	23.56	23.96	18.98	18.80	44.36	22.71	18.92	18.92
23	19.12	22.21	19.00	19.21	24.98	27.02	18.61	19.16	46.96	22.52	19.52	19.54
24	19.07	21.17	18.68	18.89	23.99	29.13	18.65	20.22	47.60	24.06	19.48	19.43
25	19.22	20.27	19.13	18.91	22.62	29.24	18.80	20.32	45.89	25.79	19.51	19.62
26	19.17	19.00	19.51	19.23	20.59	28.56	19.21	19.63	41.30	25.49	19.15	20.01
27	19.07	19.76	19.71	19.94	20.09	26.94	19.58	18.62	34.07	23.79	19.25	19.57
28	19.05	23.90	19.91	19.10	21.62	23.31	19.57	18.04	27.60	22.15	19.02	20.21
29	18.89	23.67	19.81	18.69	---	21.49	18.96	18.09	25.22	21.47	19.16	19.93
30	18.76	22.83	19.88	19.28	---	25.15	18.60	18.14	23.97	19.28	19.31	19.58
31	18.70	---	22.41	20.28	---	29.32	---	18.59	---	19.03	19.68	---
MEAN	18.88	20.41	19.38	23.10	20.71	26.47	25.26	---	27.77	24.91	19.33	19.11
MAX	20.91	23.90	22.41	30.73	24.98	35.27	36.39	---	47.60	33.90	20.15	20.21
MIN	17.85	18.84	18.17	18.69	18.98	18.96	18.60	---	18.33	19.03	18.50	18.12

02423130 CAHABA RIVER AT TRUSSVILLE, AL

LOCATION.--Lat 33°37'50", long 86°35'58", in SW¼ sec. 24, T. 16 S., R. 1 W., Jefferson County, Hydrologic Unit 03150202, near left bank on downstream side of U.S. Highway 11 bridge, 0.5 mi east of Trussville, 8.6 mi upstream from Big Black Creek, and at mile 182.3.

DRAINAGE AREA.--19.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1988 to September 1989.

GAGE.--Water-stage recorder. Datum of gage is 673.30 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-4. Water-discharge records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,190 ft³/s, Mar. 4, 1989, gage height, 4.96 ft; minimum daily discharge, 2.1 ft³/s, Sept. 10, 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 20	0615	1,670	4.58	June 22	1430	1,830	4.71
Mar. 4	2115	*2,190	*4.96	July 2	0945	1,900	4.76

Minimum daily discharge, 2.1 ft³/s, Sept. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	2.9	28	114	21	122	52	23	4.5	155	5.1	4.2
2	70	2.7	22	65	19	70	38	15	4.3	1000	5.0	4.0
3	40	2.4	18	114	19	50	32	13	4.4	371	6.2	3.3
4	25	34	17	92	18	467	255	13	5.8	208	4.8	2.9
5	13	77	14	56	26	441	235	43	9.0	106	4.2	2.5
6	9.3	21	12	49	35	167	97	33	26	77	11	2.3
7	7.0	13	12	34	87	93	63	23	9.1	67	8.1	2.3
8	5.4	10	10	33	57	63	71	19	34	62	5.4	2.3
9	4.7	8.0	9.6	36	39	47	63	18	24	35	4.8	2.3
10	4.1	6.3	9.0	106	32	46	47	24	14	23	4.5	2.1
11	4.7	6.0	9.0	161	28	41	36	17	12	18	4.1	6.7
12	4.8	5.5	8.3	203	24	36	30	14	10	14	3.8	3.0
13	3.9	7.8	7.6	337	22	31	27	12	8.3	12	3.6	2.7
14	3.7	6.2	7.2	163	19	27	24	13	12	11	4.0	13
15	3.5	5.3	7.0	134	17	26	28	13	244	10	5.9	6.7
16	3.5	5.9	6.6	93	15	23	24	11	159	9.8	4.6	4.1
17	3.4	8.8	6.2	64	14	21	21	9.8	65	8.9	4.7	4.1
18	3.2	7.4	6.6	46	15	19	20	8.7	37	7.5	4.3	4.0
19	3.3	6.8	6.3	37	15	18	20	8.5	153	11	3.9	3.5
20	3.1	450	5.9	31	16	18	18	14	145	16	3.7	3.4
21	4.1	94	5.8	26	75	120	17	11	477	7.6	3.7	7.8
22	3.9	51	5.8	23	49	102	16	10	513	8.2	3.3	38
23	3.9	34	15	21	36	177	16	9.7	193	8.4	3.0	10
24	3.7	26	15	19	28	131	15	8.3	83	8.2	2.7	8.1
25	3.3	20	17	17	24	78	13	7.6	46	7.2	2.5	49
26	3.0	21	16	16	22	54	13	6.9	28	8.5	2.7	27
27	3.0	73	14	15	43	42	12	6.5	17	6.0	2.6	13
28	3.0	89	16	14	409	34	12	6.1	16	5.4	2.6	11
29	3.2	52	15	14	---	81	11	5.6	14	5.2	2.5	16
30	3.2	37	18	13	---	224	12	5.2	100	7.1	2.4	60
31	3.1	---	61	26	---	87	---	4.9	---	5.4	2.5	---
TOTAL	283.0	1184.0	420.9	2172	1224	2956	1338	426.8	2467.4	2299.4	132.2	319.3
MEAN	9.13	39.5	13.6	70.1	43.7	95.4	44.6	13.8	82.2	74.2	4.26	10.6
MAX	70	450	61	337	409	467	255	43	513	1000	11	60
MIN	3.0	2.4	5.8	13	14	18	11	4.9	4.3	5.2	2.4	2.1
CFSM	.46	2.00	.69	3.56	2.22	4.84	2.26	.70	4.17	3.77	.22	.54
IN.	.53	2.24	.79	4.10	2.31	5.58	2.53	.81	4.66	4.34	.25	.60

WTR YR 1989 TOTAL 15223.0 MEAN 41.7 MAX 1000 MIN 2.1 CFSM 2.12 IN. 28.75

02423130 CAHABA RIVER AT TRUSSVILLE, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1988 to September 1989.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1988 to September 1989.
WATER TEMPERATURES: October 1988 to September 1989.
DISSOLVED OXYGEN: October 1988 to September 1989.

INSTRUMENTATION.-- Water-quality monitor since October 1988.

REMARKS.--Interruptions in the daily record were due to malfunctions of the instrument.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 178 microsiemens, Nov. 10; minimum, 42 microsiemens, Apr. 4.
WATER TEMPERATURES: Maximum, 27.1°C, Aug. 25; minimum, 3.0°C, Dec. 18.
DISSOLVED OXYGEN: Maximum, 11.6 mg/L, Feb. 10; minimum, 6.2 mg/L, Aug. 4, 7, 26.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	115	72	105	147	145	146	101	97	99	88	77	80
2	98	93	95	149	145	147	98	93	96	81	78	80
3	98	95	97	152	146	148	96	93	94	81	71	76
4	99	96	98	152	92	141	96	91	94	74	69	71
5	102	99	100	155	132	145	96	92	94	77	71	73
6	106	103	104	160	154	158	94	89	92	85	72	78
7	109	106	108	166	160	162	93	89	91	84	80	82
8	113	109	111	171	166	168	95	92	93	89	84	86
9	115	112	114	176	169	173	98	95	97	91	83	87
10	118	115	116	178	176	177	102	98	100	85	75	79
11	121	117	119	175	165	170	105	102	103	80	66	72
12	122	119	120	168	161	163	105	103	104	73	66	68
13	125	122	123	163	159	161	107	104	106	69	66	67
14	127	124	126	161	159	160	107	105	106	76	68	71
15	128	126	127	162	159	160	111	106	108	78	74	77
16	129	126	128	162	150	158	117	109	111	81	77	79
17	128	125	127	149	138	142	116	111	113	86	81	84
18	129	126	128	139	136	137	117	114	115	90	86	88
19	150	129	136	142	139	141	119	116	118	95	90	93
20	132	128	129	139	101	123	118	115	117	101	95	97
21	135	123	128	98	73	82	119	112	116	103	99	101
22	124	123	123	90	80	84	117	114	115	107	103	106
23	126	122	123	96	89	93	125	96	106	110	106	108
24	130	123	127	97	94	96	107	98	104	111	107	109
25	128	124	127	103	96	99	103	99	101	113	110	111
26	133	128	131	121	104	113	102	99	101	116	112	114
27	136	133	134	123	119	121	102	101	101	128	114	117
28	139	136	137	121	114	118	107	93	98	123	118	120
29	142	138	140	114	105	110	96	93	95	123	120	122
30	143	139	140	107	102	104	101	93	95	123	99	109
31	146	140	143	---	---	---	95	88	92	114	105	110
MONTH	150	72	121	178	73	137	125	88	102	128	66	91

02423130 CAHABA RIVER AT TRUSSVILLE, AL--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	112	109	110	73	64	69	95	83	89	140	109	118
2	112	108	110	82	74	77	102	94	96	138	124	127
3	113	109	111	88	81	84	107	99	103	142	130	138
4	115	109	112	92	47	78	111	42	80	144	140	142
5	116	100	110	72	56	65	67	54	60	142	92	120
6	104	87	99	80	73	76	76	65	71	121	110	116
7	101	80	86	87	81	83	85	74	79	126	120	122
8	82	80	81	97	87	92	88	73	83	129	124	126
9	89	81	83	104	97	100	89	83	87	131	119	129
10	90	88	89	110	103	107	94	89	92	119	108	113
11	94	90	92	114	109	112	102	93	97	124	118	121
12	99	95	97	118	114	116	106	98	103	127	124	125
13	104	98	101	---	---	---	112	105	109	128	125	127
14	105	103	104	130	122	125	119	110	114	132	123	126
15	125	105	109	131	126	128	119	113	116	125	119	122
16	114	111	113	137	129	132	125	114	121	127	126	126
17	115	112	113	137	134	135	129	121	125	136	127	131
18	118	111	114	139	135	138	131	126	129	139	135	137
19	113	110	111	149	135	140	133	102	127	146	135	137
20	115	110	112	151	137	141	137	128	133	146	100	136
21	111	83	91	138	89	100	140	133	137	141	128	137
22	87	81	83	88	84	85	142	138	139	145	140	143
23	93	86	90	87	74	80	142	135	139	140	136	138
24	96	93	94	81	74	77	145	136	139	143	140	142
25	99	96	97	90	82	85	148	137	143	145	142	144
26	103	99	101	98	90	94	149	138	145	146	143	145
27	105	79	101	104	98	101	148	138	141	149	145	147
28	71	58	62	110	105	108	150	138	143	151	146	148
29	---	---	---	114	63	105	148	138	142	148	145	147
30	---	---	---	74	65	69	148	136	141	148	146	147
31	---	---	---	85	75	79	---	---	---	149	145	147
MONTH	125	58	99	---	---	---	150	42	114	151	92	133

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	148	142	144	86	64	81	166	163	164	157	136	150
2	144	140	142	68	53	61	169	156	161	147	132	141
3	144	140	142	75	66	71	157	141	152	149	145	146
4	145	138	141	90	76	81	152	143	146	152	148	149
5	147	131	136	95	89	90	149	148	149	153	151	152
6	134	91	120	100	91	95	150	98	139	155	151	153
7	138	131	135	108	82	100	135	111	126	153	151	152
8	149	88	121	105	90	98	145	135	141	153	149	151
9	143	110	112	117	106	111	148	145	147	153	148	150
10	149	114	119	127	118	122	149	147	148	152	148	150
11	125	117	119	132	127	128	149	148	149	151	98	133
12	121	119	120	138	132	135	151	149	149	142	137	138
13	124	120	122	143	137	141	152	149	150	144	140	142
14	143	104	121	151	141	143	151	149	150	144	79	129
15	121	68	93	153	142	144	149	129	143	136	107	126
16	76	70	72	149	146	147	151	131	141	141	137	139
17	87	76	81	149	145	148	155	137	143	141	137	139
18	96	87	92	153	148	151	145	142	143	144	138	139
19	97	74	82	152	122	144	147	143	145	141	137	140
20	83	64	78	147	93	124	151	147	149	145	138	140
21	76	66	73	153	145	149	151	149	150	146	91	134
22	72	49	67	156	148	151	153	150	151	132	95	113
23	88	71	78	159	149	151	153	150	152	141	132	138
24	95	85	88	154	140	150	151	148	149	143	139	142
25	105	94	100	170	152	156	152	148	150	145	93	127
26	117	106	110	152	141	146	173	149	155	145	122	136
27	135	120	126	156	151	154	153	150	151	152	145	148
28	128	122	125	168	155	158	153	150	151	154	150	152
29	132	128	130	168	157	159	154	151	153	152	141	147
30	136	81	112	165	116	152	156	153	155	140	128	135
31	---	---	---	170	162	165	155	154	154	---	---	---
MONTH	149	49	110	170	53	129	173	98	149	157	79	141

02423130 CAHABA RIVER AT TRUSSVILLE, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.2	20.3	20.7	15.4	12.8	13.8	10.1	8.3	9.4	11.1	10.0	10.7
2	20.9	20.1	20.5	14.9	11.4	13.2	9.3	7.5	8.6	10.8	9.5	10.1
3	20.7	19.4	20.3	15.4	12.0	13.8	9.3	6.8	8.3	11.9	10.3	11.0
4	19.2	17.4	18.3	15.2	13.5	14.4	9.9	8.1	9.1	10.5	8.6	9.8
5	17.5	15.7	16.6	15.5	13.8	14.7	9.2	7.1	8.2	9.5	7.8	8.7
6	16.6	14.2	15.5	13.9	12.4	13.3	9.0	6.6	7.9	12.5	9.0	11.0
7	16.6	14.3	15.4	13.2	10.8	12.3	10.3	7.9	9.1	13.5	10.7	12.2
8	15.9	13.2	14.6	14.3	13.2	13.8	10.6	8.3	9.6	13.5	11.0	12.4
9	15.3	12.8	14.1	15.4	14.4	14.8	10.3	7.8	9.4	10.9	9.2	9.7
10	16.4	13.6	15.0	15.9	14.2	15.2	8.5	6.7	7.7	10.7	9.0	9.9
11	16.7	13.7	15.1	14.1	11.9	13.2	8.6	7.2	8.0	11.2	10.3	10.5
12	15.6	13.1	14.3	13.7	11.2	12.6	7.9	6.2	7.0	12.4	11.2	11.8
13	14.1	11.1	12.7	15.1	13.1	14.1	7.5	4.9	6.2	12.2	10.7	11.4
14	13.6	10.0	12.0	13.9	12.0	13.0	8.0	4.7	6.6	11.2	10.6	10.8
15	13.9	10.2	12.2	15.4	13.1	14.3	9.1	7.6	8.3	11.1	10.3	10.9
16	14.7	11.0	13.0	16.1	14.7	15.3	7.7	5.1	6.7	11.2	9.0	10.2
17	16.1	12.6	14.4	14.6	11.3	13.3	5.9	3.6	4.8	10.4	7.7	9.0
18	17.5	14.0	15.9	12.6	9.6	11.3	5.6	3.0	4.4	10.4	7.4	8.9
19	17.6	14.6	16.2	15.1	12.6	13.6	6.7	3.4	5.2	10.7	8.2	9.5
20	14.2	12.5	13.6	17.5	14.3	15.7	8.7	5.4	7.0	10.9	9.1	10.3
21	14.8	13.8	14.3	14.4	12.4	13.7	10.2	8.2	9.3	9.3	7.4	8.5
22	15.1	12.4	13.6	13.7	11.4	12.6	12.7	10.0	11.4	9.4	7.0	8.2
23	14.7	11.1	13.0	14.1	12.4	13.2	12.8	12.3	12.5	9.5	6.6	8.3
24	15.4	12.8	14.1	12.8	10.4	11.8	13.4	11.6	12.6	10.3	8.1	9.3
25	14.5	10.9	12.8	13.5	11.0	12.4	11.4	9.0	10.2	10.9	8.0	9.6
26	13.2	11.8	12.6	15.6	13.1	14.0	9.6	7.5	8.7	11.1	8.8	10.0
27	16.0	12.5	14.1	15.1	13.1	14.3	11.3	8.8	10.1	12.0	9.7	11.1
28	15.1	13.6	14.3	12.9	10.7	12.2	11.9	8.7	10.9	10.7	7.7	9.5
29	16.5	13.9	15.1	11.8	9.5	10.6	8.4	6.5	7.4	11.8	8.8	10.5
30	15.4	13.0	14.4	11.6	9.6	10.5	8.7	7.1	7.8	12.9	11.0	11.9
31	14.1	13.2	13.7	---	---	---	10.7	8.8	9.6	11.8	9.0	10.7
MONTH	21.2	10.0	14.9	17.5	9.5	13.4	13.4	3.0	8.5	13.5	6.6	10.2
	FEBRUARY			MARCH			APRIL			MAY		
1	13.5	10.4	11.9	9.5	9.2	9.4	15.8	11.0	13.2	18.8	17.7	18.2
2	15.4	13.5	14.3	10.5	9.0	9.8	16.3	11.0	13.5	18.8	16.1	17.4
3	14.7	12.1	13.9	11.5	9.8	10.6	15.7	13.7	14.6	17.7	15.1	16.3
4	11.8	9.6	10.3	12.4	10.7	11.3	15.7	14.3	15.0	15.9	15.3	15.5
5	9.5	8.9	9.2	13.5	11.8	12.8	15.7	13.3	14.4	17.0	15.2	16.0
6	9.3	8.0	8.9	12.4	9.3	10.7	14.0	12.0	13.0	17.9	15.4	16.5
7	8.5	7.3	7.9	9.2	8.5	8.9	15.5	12.1	13.5	16.7	13.5	15.2
8	9.0	6.8	7.7	11.4	8.2	9.5	13.9	12.2	13.0	17.0	13.3	15.4
9	7.6	5.4	6.5	12.7	8.1	10.3	12.9	11.7	12.4	17.6	16.1	16.9
10	7.8	4.2	6.0	13.7	8.8	11.2	12.2	10.8	11.7	17.3	15.6	16.7
11	8.8	5.0	6.9	14.7	9.7	12.2	14.2	9.4	11.6	16.7	13.6	15.3
12	10.3	6.5	8.5	15.5	10.7	13.1	14.5	9.7	12.1	16.8	13.0	15.1
13	11.9	8.9	10.3	16.3	12.0	14.0	15.9	10.6	13.3	16.0	14.1	15.1
14	14.7	11.7	13.1	17.5	13.2	15.4	14.8	11.6	13.5	15.7	14.6	15.2
15	16.2	13.3	14.6	17.3	15.2	16.1	14.9	13.5	14.2	18.4	15.0	16.6
16	14.4	13.0	13.8	16.8	13.6	15.2	17.1	12.1	14.6	18.5	15.1	16.9
17	12.8	10.2	11.7	17.3	12.6	15.1	17.8	12.6	15.3	19.8	15.6	17.7
18	10.1	8.5	9.2	18.0	14.4	16.2	18.5	13.8	16.2	18.6	17.3	18.0
19	9.8	8.2	9.1	16.5	13.1	15.1	16.8	14.9	15.9	20.7	17.4	18.9
20	11.4	9.5	10.2	17.2	13.7	15.6	18.3	14.0	16.2	19.6	18.6	19.3
21	12.1	10.9	11.5	16.1	12.8	14.7	19.0	15.6	17.2	21.6	17.8	19.6
22	10.8	8.0	9.6	12.9	11.7	12.4	18.9	14.7	17.0	20.4	18.6	19.6
23	7.8	5.7	6.9	11.6	10.9	11.2	19.8	15.7	17.8	22.7	19.1	20.7
24	7.8	4.2	6.0	12.8	10.9	11.7	20.2	16.4	18.4	22.9	18.6	20.7
25	8.8	4.5	6.9	13.8	11.2	12.3	20.2	16.5	18.5	23.8	20.0	21.6
26	10.3	8.1	9.2	16.1	11.4	13.7	20.3	16.8	18.7	24.9	21.2	22.7
27	10.5	8.7	10.1	17.2	12.4	14.8	20.6	17.3	19.1	24.5	21.3	22.6
28	11.0	8.6	9.6	18.2	13.2	15.8	21.4	17.7	19.5	23.8	19.3	21.3
29	---	---	---	18.5	14.5	16.4	20.9	18.6	19.6	23.2	18.4	20.7
30	---	---	---	16.4	14.7	15.3	19.9	17.8	19.0	24.1	19.3	21.5
31	---	---	---	14.7	12.3	14.2	---	---	---	25.2	20.4	22.6
MONTH	16.2	4.2	9.8	18.5	8.1	13.1	21.4	9.4	15.4	25.2	13.0	18.3

02423130 CAHABA RIVER AT TRUSSVILLE, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.1	21.2	23.0	22.7	21.6	22.0	23.9	21.4	22.8	25.7	23.3	24.1
2	25.3	21.4	23.0	21.6	20.2	20.6	24.4	21.5	22.5	24.4	22.4	23.4
3	23.4	21.5	22.3	20.8	20.0	20.3	24.6	22.4	23.4	25.7	22.2	23.8
4	22.6	20.9	21.6	21.4	20.0	20.5	26.4	22.2	23.9	25.4	22.8	23.9
5	21.1	20.1	20.6	20.8	20.0	20.3	26.2	22.6	24.5	25.1	21.4	23.2
6	22.5	19.2	20.8	22.1	20.0	20.9	26.9	23.3	24.6	24.4	22.1	23.0
7	22.5	19.8	21.2	21.8	20.5	21.0	24.6	22.4	23.3	24.4	22.1	23.0
8	21.1	20.1	20.4	22.6	19.9	21.2	23.3	20.6	21.7	24.7	21.5	23.0
9	21.6	20.2	20.8	22.3	20.4	21.3	22.4	19.6	21.1	25.2	21.5	23.4
10	22.0	19.3	20.7	22.7	19.7	21.4	23.3	19.6	21.4	24.5	22.8	23.5
11	21.1	19.8	20.5	23.0	20.2	21.3	23.0	19.7	21.4	23.2	22.0	22.6
12	22.6	19.8	21.1	23.3	20.5	21.6	23.6	19.8	21.5	24.7	21.9	23.2
13	24.3	21.3	22.5	22.2	20.6	21.5	23.3	19.7	21.4	25.3	22.1	23.6
14	24.1	21.2	22.2	21.8	19.9	21.2	22.8	20.5	21.6	25.2	22.1	23.2
15	21.2	19.5	20.6	22.3	19.7	21.1	23.8	20.8	22.2	22.8	21.1	22.1
16	20.8	19.2	19.9	21.7	20.7	21.0	22.7	21.2	21.9	21.4	19.7	20.6
17	21.9	18.5	20.1	22.7	20.1	21.2	22.8	21.0	21.9	22.1	19.0	20.5
18	21.9	19.1	20.5	22.2	19.3	20.8	24.1	20.8	22.3	21.7	18.4	20.0
19	20.9	19.8	20.3	22.3	20.6	21.4	24.2	20.8	22.5	21.8	18.3	20.0
20	21.1	19.6	20.2	22.3	19.7	21.2	24.4	21.2	22.7	21.8	18.2	20.0
21	20.4	19.1	19.7	---	---	---	24.8	21.7	23.2	20.9	18.8	19.9
22	20.4	18.8	19.6	21.7	20.5	21.2	25.5	22.3	23.8	21.0	20.0	20.4
23	20.5	18.4	19.4	22.2	19.7	21.2	26.6	22.9	24.6	20.1	17.6	19.4
24	21.3	19.3	20.3	---	---	---	26.9	23.3	25.0	17.4	15.9	16.6
25	22.7	20.0	21.3	---	---	---	27.1	23.3	25.0	16.5	15.7	16.1
26	23.2	20.5	21.8	---	---	---	26.6	24.0	25.1	18.6	16.7	17.6
27	23.2	20.3	21.8	---	---	---	26.7	23.2	24.9	19.2	17.7	18.4
28	23.1	21.0	22.1	25.0	23.0	23.7	26.5	23.3	24.9	18.4	16.5	17.3
29	22.8	21.0	21.9	25.3	23.7	24.5	26.5	23.5	24.9	17.0	16.4	16.7
30	23.0	21.1	21.8	23.8	22.3	23.1	25.9	23.6	24.6	18.5	17.1	17.9
31	---	---	---	25.0	21.7	23.2	25.6	23.0	24.3	---	---	---
MONTH	25.3	18.4	21.1	---	---	---	27.1	19.6	23.2	25.7	15.7	21.0

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.4	6.9	7.1	8.4	7.4	7.8	10.5	9.9	10.1	9.8	9.5	9.6
2	7.5	7.1	7.3	8.3	7.4	7.8	10.6	10.0	10.2	10.3	9.6	9.9
3	7.6	7.1	7.3	8.4	6.9	7.7	10.6	9.8	10.2	9.8	9.5	9.6
4	8.3	7.3	7.7	8.2	6.8	7.2	10.3	9.8	10.0	10.3	9.8	10.0
5	8.6	7.7	8.1	8.3	7.9	8.1	10.6	9.8	10.1	10.7	9.8	10.3
6	8.8	8.0	8.3	8.6	8.1	8.3	10.5	9.8	10.1	10.0	9.1	9.6
7	9.0	8.1	8.5	9.0	8.3	8.6	10.2	9.3	9.7	9.8	8.7	9.3
8	9.1	8.2	8.5	8.5	8.1	8.3	10.2	9.1	9.6	9.6	8.7	9.1
9	9.3	8.2	8.6	8.3	7.9	8.1	10.1	9.1	9.5	10.0	9.2	9.6
10	9.1	8.0	8.4	8.2	7.9	8.0	10.5	9.4	9.8	9.9	9.5	9.7
11	9.1	8.0	8.3	8.9	8.0	8.5	10.2	9.3	9.6	9.6	9.4	9.5
12	9.2	8.0	8.5	9.2	8.1	8.7	10.5	9.4	9.8	9.4	9.0	9.2
13	9.4	8.3	8.8	8.7	8.0	8.3	10.6	9.5	9.9	9.5	9.2	9.4
14	9.6	8.6	8.9	9.2	8.4	8.7	10.7	9.2	9.9	9.5	9.2	9.4
15	9.5	8.5	8.9	8.9	8.1	8.5	10.3	9.0	9.5	9.4	9.2	9.3
16	9.5	8.4	8.8	8.5	8.0	8.2	10.5	9.0	9.7	9.7	9.3	9.4
17	9.2	8.1	8.6	9.4	8.3	8.9	10.8	9.5	10.1	10.0	9.3	9.6
18	9.0	7.5	8.3	9.9	9.1	9.4	10.9	9.6	10.2	10.1	9.2	9.6
19	8.3	7.0	7.6	9.1	8.5	8.9	10.9	9.4	10.0	10.0	9.0	9.5
20	8.8	7.6	8.1	9.2	8.3	8.9	10.9	8.9	9.8	9.8	9.0	9.3
21	8.2	7.6	7.8	9.5	9.3	9.4	10.3	8.5	9.2	10.3	9.3	9.7
22	8.9	7.9	8.2	9.8	9.3	9.6	10.4	8.1	9.0	10.4	9.3	9.7
23	9.0	7.9	8.4	9.5	9.2	9.3	9.2	8.0	8.4	10.5	9.1	9.8
24	8.4	7.4	7.8	9.9	9.3	9.6	9.2	8.3	8.6	10.9	9.1	9.7
25	8.8	7.6	8.1	9.8	9.2	9.5	10.1	8.6	9.3	10.9	9.1	9.8
26	8.5	7.7	8.0	9.3	8.6	9.1	10.6	9.2	9.7	11.0	8.9	9.7
27	8.5	7.4	7.9	9.4	8.8	9.1	10.5	8.9	9.5	11.0	8.8	9.6
28	8.0	7.3	7.5	9.8	9.4	9.7	10.0	8.6	9.2	11.4	9.0	9.9
29	8.2	7.2	7.6	10.2	9.6	9.9	10.9	9.4	10.1	11.5	8.7	9.8
30	8.6	7.3	7.8	10.0	9.6	9.8	10.5	9.7	10.0	10.3	8.6	9.1
31	8.0	7.4	7.6	---	---	---	9.8	9.5	9.7	11.3	8.7	9.6
MONTH	9.6	6.9	8.1	10.2	6.8	8.7	10.9	8.0	9.7	11.5	8.6	9.6

02423130 CAHABA RIVER AT TRUSSVILLE, AL--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.4	8.3	9.5	9.5	9.3	9.4	9.8	8.6	9.2	7.7	6.7	7.3
2	11.0	8.2	9.0	9.6	9.0	9.3	9.7	8.3	9.1	8.7	7.3	7.9
3	10.1	8.2	8.9	9.4	8.8	9.1	9.1	8.3	8.7	9.4	7.5	8.2
4	11.1	8.6	9.6	9.1	8.7	8.9	8.9	8.3	8.6	8.8	7.8	8.1
5	10.2	9.1	9.5	8.9	8.5	8.7	9.1	8.7	8.9	8.2	7.9	8.1
6	10.5	9.2	9.7	9.2	8.6	8.9	9.3	8.9	9.0	8.9	7.9	8.4
7	10.4	9.6	10.0	9.4	9.2	9.3	9.3	8.7	9.0	9.3	8.1	8.6
8	10.9	9.7	10.2	9.7	9.0	9.4	9.1	8.7	8.9	9.4	7.9	8.6
9	11.4	10.0	10.5	9.7	8.9	9.3	9.4	8.9	9.2	8.9	7.7	8.2
10	11.6	9.8	10.6	9.7	8.6	9.2	9.6	9.1	9.3	8.9	7.8	8.3
11	11.5	9.5	10.3	9.5	8.4	8.9	10.0	8.9	9.4	9.3	8.1	8.6
12	11.4	9.0	10.1	9.5	8.3	8.9	10.1	8.8	9.4	9.5	8.1	8.7
13	11.1	8.6	9.7	9.8	8.4	8.9	10.0	8.6	9.3	9.5	8.1	8.7
14	10.9	8.2	9.3	9.6	8.1	8.7	10.0	8.6	9.2	9.2	8.2	8.6
15	10.7	7.9	9.0	9.7	8.2	8.6	9.6	8.6	8.9	9.3	7.9	8.6
16	10.5	8.0	8.9	10.3	8.3	9.1	10.0	8.4	9.1	9.5	7.9	8.6
17	10.1	8.3	9.1	10.8	8.2	9.3	10.3	8.3	9.1	9.4	7.6	8.4
18	10.3	8.9	9.5	11.0	8.1	9.2	10.2	8.1	9.0	9.0	7.6	8.1
19	11.2	9.0	9.8	11.5	8.2	9.5	10.1	8.0	8.7	9.0	7.2	8.0
20	10.0	8.6	9.2	11.3	7.9	9.4	10.1	7.7	8.7	7.9	7.0	7.4
21	9.4	8.5	8.9	9.2	7.9	8.8	10.1	7.6	8.6	8.5	7.1	7.7
22	9.8	8.9	9.3	10.0	9.2	9.5	10.4	7.5	8.6	8.3	7.1	7.6
23	11.0	9.5	10.1	9.8	9.4	9.6	10.1	7.3	8.4	8.3	6.9	7.4
24	11.3	9.7	10.4	10.0	9.4	9.7	10.0	7.2	8.3	8.3	6.8	7.4
25	11.3	9.2	10.3	10.1	9.1	9.6	9.8	7.1	8.2	8.1	6.6	7.2
26	10.6	8.8	9.6	10.2	8.6	9.4	9.6	7.0	8.1	7.9	6.5	7.0
27	9.4	8.7	9.0	10.1	8.3	9.1	9.6	6.9	8.0	8.0	6.5	7.0
28	9.6	9.2	9.4	10.2	8.1	9.0	9.2	6.8	7.8	8.1	6.6	7.2
29	---	---	---	10.2	7.9	8.8	9.1	6.8	7.6	8.3	6.7	7.4
30	---	---	---	8.9	8.6	8.7	8.9	7.0	7.7	8.3	6.6	7.3
31	---	---	---	9.2	8.6	8.9	---	---	---	8.4	6.6	7.2
MONTH	11.6	7.9	9.6	11.5	7.9	9.1	10.4	6.8	8.7	9.5	6.5	7.9
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.1	6.5	7.1	8.3	7.9	8.1	8.0	6.7	7.2	8.1	6.6	7.0
2	8.2	6.5	7.1	8.4	8.2	8.3	7.9	6.5	7.1	8.3	6.5	7.2
3	8.1	6.5	7.1	8.4	8.3	8.3	7.7	6.3	6.9	8.6	6.9	7.5
4	8.1	6.6	7.2	8.5	8.0	8.3	7.8	6.2	6.8	8.7	6.9	7.6
5	7.8	7.0	7.4	8.3	7.7	8.1	7.7	6.4	6.9	8.7	7.0	7.6
6	8.0	7.1	7.6	7.9	7.4	7.7	7.8	6.4	6.9	8.8	6.8	7.5
7	8.2	7.0	7.5	7.9	7.5	7.6	7.4	6.2	6.8	8.7	6.6	7.3
8	7.7	7.0	7.3	7.9	7.3	7.6	8.2	6.7	7.3	8.8	6.7	7.4
9	8.1	7.4	7.7	7.9	7.3	7.6	8.5	7.0	7.6	9.0	6.6	7.5
10	8.4	7.3	7.8	8.0	7.1	7.5	8.8	7.1	7.7	8.2	6.4	7.1
11	8.1	7.3	7.7	8.2	7.1	7.5	8.8	7.2	7.8	8.1	6.5	7.1
12	8.1	7.1	7.6	8.1	6.9	7.4	8.8	7.2	7.8	8.8	6.4	7.2
13	8.2	6.9	7.4	8.2	7.0	7.4	8.9	7.2	7.8	9.4	6.3	7.3
14	8.0	6.8	7.3	8.1	7.0	7.4	8.7	7.2	7.7	9.3	6.6	7.5
15	8.0	7.3	7.6	8.6	7.0	7.6	8.7	6.8	7.7	7.1	6.7	6.9
16	8.2	7.8	8.0	8.1	7.0	7.5	8.1	6.7	7.3	8.9	6.9	7.7
17	8.3	7.6	8.0	8.9	7.1	7.8	8.2	6.9	7.4	9.2	7.2	8.0
18	8.2	7.4	7.8	9.0	7.1	7.7	8.7	6.9	7.5	9.4	7.4	8.2
19	8.0	7.5	7.8	8.1	6.7	7.3	8.7	6.9	7.5	10.1	7.6	8.4
20	8.1	7.7	7.9	7.7	6.7	7.1	8.7	6.8	7.5	10.1	7.5	8.4
21	8.2	7.8	8.1	8.1	6.9	7.4	8.2	6.7	7.3	9.7	7.4	8.1
22	8.1	7.8	8.0	8.0	7.0	7.4	8.3	6.6	7.2	8.2	7.5	7.8
23	8.3	7.9	8.1	8.3	6.9	7.4	8.2	6.5	7.1	8.7	7.5	7.9
24	8.2	7.7	7.9	8.3	6.9	7.4	8.2	6.4	7.0	9.5	7.9	8.6
25	8.1	7.6	7.9	8.2	6.8	7.3	8.3	6.5	7.1	8.9	8.1	8.5
26	8.1	7.6	7.8	8.2	6.8	7.4	7.9	6.2	6.8	8.8	7.9	8.4
27	8.4	7.6	7.9	8.1	6.7	7.2	8.3	6.4	7.1	9.1	7.9	8.3
28	8.4	7.6	7.9	8.1	6.7	7.2	8.2	6.7	7.2	8.6	7.9	8.2
29	8.6	7.5	8.0	8.2	6.5	7.2	8.4	6.6	7.3	8.5	8.2	8.3
30	8.3	7.6	8.0	7.7	6.5	6.8	7.9	6.5	7.1	8.3	8.1	8.2
31	---	---	---	8.0	6.6	7.1	8.3	6.8	7.4	---	---	---
MONTH	8.6	6.5	7.7	9.0	6.5	7.5	8.9	6.2	7.3	10.1	6.3	7.8
YEAR	11.6	6.2	8.5									

02423380 CAHABA RIVER NEAR MOUNTAIN BROOK, AL

LOCATION.--Lat 33°28'54", long 86°42'46", in NE¼ sec. 11, T. 18 S., R. 2 W., Jefferson County, Hydrologic Unit 03150202, on downstream side bridge on county road, 0.1 mi upstream from Fuller Creek, 3.5 mi east of Mountain Brook, 5.4 mi upstream from Little Cahaba River, and at mi 153.6.

DRAINAGE AREA.--140 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to September 1981, June 1984 to current year. March 1976 to September 1980 and October 1981 to September 1984 in files of Barton Laboratory, Jefferson County Commission.

GAGE.--Water-stage recorder. Datum of gage is 443.85 ft above National Geodetic Vertical Datum of 1929 (levels by Jefferson County Engineering Department).

REMARKS.--Estimated daily discharges: June 4-22, July 7-20. Records good except those for periods of estimated record, which are poor. Birmingham Water Works Board satellite telemeter at station.

AVERAGE DISCHARGE.--6 years (water years 1981; 1985-89), 173 ft³/s, 16.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,750 ft³/s, Mar. 30, 1981, gage height 10.84 ft; minimum, 2.2 ft³/s, Oct. 16, 17, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 13, 1979, reached a stage of 20.6 ft, present datum, discharge 19,000 ft³/s.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 5	0330	*6,410	*12.10	July 2	1830	4,310	9.09

Minimum discharge, 18 ft³/s, Oct. 17, 18, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	20	276	1190	163	1260	546	159	38	475	92	56
2	567	21	217	692	152	718	398	196	36	3310	72	57
3	344	20	184	582	141	500	337	129	35	2310	67	54
4	266	43	163	740	137	1940	724	107	e40	1460	67	38
5	175	385	145	493	150	4440	2150	194	e60	1440	57	30
6	121	252	132	418	221	1750	1050	379	e120	1040	50	24
7	91	151	122	361	536	976	696	242	e80	e750	62	23
8	72	117	114	314	510	626	555	181	e140	e550	76	21
9	58	99	104	322	366	456	977	155	e110	e400	56	21
10	49	83	95	671	293	364	615	200	e90	e320	48	24
11	43	71	88	947	253	306	444	171	e70	e240	41	62
12	38	64	80	1520	223	265	360	131	e55	e190	38	44
13	32	99	74	2880	196	234	305	108	e60	e150	36	52
14	27	120	72	1540	181	213	257	103	e200	e130	32	28
15	24	99	69	1220	166	196	289	123	e1300	e110	32	27
16	21	92	67	867	152	177	257	108	e900	e100	38	59
17	19	85	62	599	139	160	212	88	e500	e90	143	37
18	19	83	57	456	139	153	188	72	e250	e80	77	28
19	22	74	53	373	152	144	172	65	e300	e95	49	24
20	20	1650	53	316	158	139	182	95	e400	e160	38	22
21	32	941	54	262	422	839	155	123	e1300	131	31	64
22	33	439	53	224	426	716	140	95	e1800	107	28	337
23	33	305	136	204	318	872	123	98	1490	113	29	165
24	29	232	200	185	253	992	113	81	765	117	28	98
25	25	188	157	70	217	579	108	67	496	101	30	164
26	24	179	143	158	201	417	101	59	346	92	24	378
27	23	583	131	153	208	337	97	54	248	85	27	190
28	21	713	138	142	2040	280	90	49	191	70	34	127
29	21	480	143	132	---	351	84	44	162	63	24	118
30	18	351	144	164	---	1890	80	44	156	138	23	240
31	19	---	890	190	---	970	---	40	---	125	33	---
TOTAL	2418	8039	4416	18385	8513	23260	11805	3760	11738	14542	1482	2612
MEAN	78.0	268	142	593	304	750	393	121	391	469	47.8	87.1
MAX	567	1650	890	2880	2040	4440	2150	379	1800	3310	143	378
MIN	18	20	53	70	137	139	80	40	35	63	23	21
CFSM	.56	1.91	1.02	4.24	2.17	5.36	2.81	.87	2.79	3.35	.34	.62
IN.	.64	2.14	1.17	4.89	2.26	6.18	3.14	1.00	3.12	3.86	.39	.69

CAL YR 1988 TOTAL 51758.9 MEAN 141 MAX 2320 MIN 3.5 CFSM 1.01 IN. 13.75
WTR YR 1989 TOTAL 110970 MEAN 304 MAX 4440 MIN 18 CFSM 2.17 IN. 29.49

e Estimated

02423380 CAHABA RIVER NEAR MOUNTAIN BROOK, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1987 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1987 to current year.
WATER TEMPERATURE: October 1987 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1987.

REMARKS.--Interruptions in the daily record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 493 microsiemens, May 30, 1988; minimum, 69 microsiemens, July 16, 1988.
WATER TEMPERATURE: Maximum, 30.7°C, Aug. 10, 1988; minimum, 2.3°C, Dec. 19, 1988.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 362 microsiemens, Sept. 5; minimum, 71 microsiemens, Nov. 20.
WATER TEMPERATURE: Maximum, 28.9°C, Aug. 4; minimum, 2.3°C, Dec. 19.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	206	129	186	271	254	266	132	120	125	119	108	112
2	209	179	193	276	271	274	130	120	126	115	108	110
3	185	167	176	283	275	279	137	129	134	123	112	119
4	168	163	165	287	176	274	145	137	141	118	112	116
5	167	160	163	261	175	241	151	144	148	124	112	116
6	181	166	173	257	204	233	158	151	154	141	123	132
7	183	170	177	205	195	201	166	157	162	166	141	153
8	176	168	171	197	170	181	175	165	170	169	162	164
9	170	161	165	171	158	162	183	174	179	168	164	166
10	178	170	174	158	147	156	192	183	187	169	153	162
11	182	176	179	159	155	157	199	191	195	153	121	140
12	184	179	181	163	153	160	204	198	201	125	118	122
13	189	183	186	169	163	166	208	203	205	149	122	137
14	195	189	191	174	162	169	212	206	209	154	94	133
15	201	194	198	192	166	183	217	211	214	113	98	105
16	205	200	203	193	191	192	217	202	209	128	112	120
17	210	205	207	192	183	188	204	201	202	140	128	135
18	215	210	212	187	181	183	204	200	202	147	140	144
19	218	213	216	188	186	187	209	202	206	151	146	149
20	220	216	218	186	71	131	218	209	214	153	151	152
21	222	214	219	177	117	156	225	218	221	152	149	150
22	229	220	225	149	118	134	228	224	226	152	148	150
23	242	228	235	176	149	164	230	194	207	155	149	152
24	248	241	245	188	176	182	199	189	192	159	154	157
25	253	248	250	198	187	192	206	193	200	163	158	160
26	258	252	255	199	191	195	206	201	203	168	161	164
27	265	258	262	193	174	180	206	197	202	172	168	170
28	346	264	266	174	171	172	198	177	188	175	171	173
29	269	242	262	174	153	164	177	165	171	185	175	182
30	262	260	261	152	132	141	165	160	162	186	173	177
31	267	252	260	---	---	---	160	110	133	185	177	181
MONTH	346	129	209	287	71	189	230	110	183	186	94	145

02423380 CAHABA RIVER NEAR MOUNTAIN BROOK, AL--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	188	182	184	143	113	127	172	156	163	194	174	187
2	189	187	188	164	143	153	184	172	177	194	184	189
3	195	187	191	179	164	171	194	184	189	188	164	178
4	195	185	192	191	169	183	211	194	202	179	164	173
5	186	159	171	168	95	159	214	209	211	176	127	156
6	167	161	164	105	96	102	222	213	217	188	140	156
7	161	137	146	105	99	103	230	222	225	140	131	135
8	137	126	131	103	99	101	236	229	232	144	130	135
9	130	124	126	103	97	100	242	235	237	167	144	153
10	132	124	127	104	97	101	243	233	238	176	168	173
11	136	128	132	115	104	109	233	114	168	171	161	167
12	140	132	135	123	114	119	124	116	120	166	154	159
13	147	138	143	132	122	126	131	123	127	174	167	171
14	155	145	151	143	131	136	136	131	133	173	136	147
15	161	154	157	150	142	145	139	134	136	144	137	140
16	162	157	159	161	149	155	144	139	142	152	144	148
17	162	157	159	174	161	167	146	141	144	167	151	158
18	173	162	168	181	173	177	145	143	144	178	167	171
19	177	173	175	184	180	182	148	143	145	171	160	167
20	183	177	179	184	177	181	158	147	152	174	145	164
21	183	139	149	177	155	166	162	156	159	181	166	174
22	150	138	143	154	131	143	162	156	159	186	174	182
23	151	140	146	131	116	123	167	162	164	194	180	188
24	151	145	148	116	100	106	170	166	168	201	192	195
25	150	145	148	105	99	101	175	168	171	201	191	193
26	152	147	150	115	106	111	176	173	174	200	196	198
27	157	131	152	126	115	120	179	174	177	196	184	191
28	133	101	110	136	126	131	183	177	179	189	183	185
29	---	---	---	143	101	132	220	180	196	194	184	187
30	---	---	---	129	97	111	194	187	189	200	195	197
31	---	---	---	156	129	144	---	---	---	203	195	198
MONTH	195	101	154	191	95	135	243	114	175	203	127	171

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	207	200	203	179	124	170	191	145	162	287	260	273
2	214	206	209	120	81	93	209	174	189	286	258	271
3	---	---	---	92	83	87	237	194	217	336	286	306
4	---	---	---	99	87	93	242	210	227	361	337	351
5	---	---	---	100	88	94	250	222	234	362	332	343
6	---	---	---	105	99	102	295	251	270	333	322	327
7	---	---	---	116	104	109	334	294	316	332	319	324
8	---	---	---	167	114	130	330	268	285	333	312	320
9	---	---	---	176	106	143	299	272	288	329	320	325
10	---	---	---	136	128	132	303	297	300	330	320	324
11	---	---	---	144	133	139	301	294	298	329	250	285
12	---	---	---	155	143	149	333	298	312	290	276	284
13	---	---	---	163	146	157	335	323	329	285	263	277
14	---	---	---	171	162	167	332	309	315	287	284	285
15	---	---	---	178	171	174	311	299	307	288	279	284
16	---	---	---	184	177	181	299	281	288	282	249	263
17	---	---	---	191	184	188	288	98	236	259	247	251
18	---	---	---	197	190	193	201	153	178	274	259	267
19	---	---	---	198	193	196	222	200	207	280	274	277
20	---	---	---	201	189	196	234	222	229	289	279	283
21	---	---	---	213	200	204	251	234	243	297	164	276
22	---	---	---	221	211	215	258	250	254	252	175	213
23	140	91	110	237	208	220	260	256	257	253	218	239
24	146	121	129	238	189	201	261	255	257	243	229	234
25	139	129	134	228	191	205	270	202	256	263	169	237
26	142	135	139	275	200	240	281	249	269	230	147	185
27	148	141	145	286	196	216	289	281	286	201	177	186
28	154	147	150	238	194	206	294	287	291	183	177	179
29	164	153	159	252	192	211	294	285	289	188	183	185
30	168	160	164	269	191	210	308	283	289	192	182	187
31	---	---	---	232	166	199	310	285	296	---	---	---
MONTH	---	---	---	286	81	168	335	98	264	362	147	268

02423380 CAHABA RIVER NEAR MOUNTAIN BROOK, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	22.2	21.1	21.8	14.7	13.6	14.0	9.3	8.3	8.7	10.3	9.4	9.9
2	21.4	21.0	21.1	13.9	12.8	13.3	8.3	7.3	7.7	9.9	9.5	9.8
3	21.2	20.5	20.9	14.1	12.8	13.4	7.4	6.2	6.9	10.9	9.9	10.4
4	20.5	19.1	19.6	15.1	13.5	13.9	7.2	6.4	6.8	10.5	9.0	9.8
5	19.1	17.3	18.1	15.1	13.9	14.4	6.7	6.0	6.4	9.0	8.0	8.4
6	17.2	16.2	16.7	14.0	13.0	13.6	16.1	5.6	6.4	10.3	8.3	9.4
7	16.8	15.7	16.2	13.0	11.5	12.2	7.0	6.1	6.6	11.9	10.0	10.7
8	15.8	14.6	15.3	13.0	12.3	12.7	7.5	6.5	7.0	12.1	11.5	12.0
9	15.1	13.9	14.6	13.8	13.0	13.5	17.5	7.0	8.1	11.5	9.8	10.6
10	15.2	14.1	14.7	14.6	13.5	14.0	16.9	6.3	7.4	9.7	9.4	9.5
11	15.3	14.1	14.8	13.9	12.5	13.2	16.4	6.4	6.9	10.5	9.6	10.0
12	15.1	13.8	14.4	13.1	11.6	12.4	16.3	5.4	6.8	11.8	10.4	11.0
13	14.1	12.7	13.3	14.1	12.8	13.4	15.1	4.6	5.3	11.9	11.1	11.6
14	13.0	11.7	12.4	13.3	12.6	12.9	5.8	4.1	5.0	11.1	10.9	11.0
15	12.8	11.3	12.1	14.1	12.9	13.5	6.7	5.6	6.2	11.1	10.7	11.0
16	13.2	11.7	12.4	14.5	13.8	14.1	6.6	4.9	5.8	10.7	9.8	10.3
17	14.3	12.6	13.4	14.0	12.2	13.3	4.9	3.6	4.1	9.7	8.5	8.9
18	15.3	13.7	14.5	12.2	11.0	11.8	3.6	2.7	3.2	8.5	7.5	8.1
19	16.2	15.1	15.5	13.9	12.0	12.8	3.4	2.3	3.0	8.7	7.8	8.2
20	15.1	14.0	14.3	17.8	14.0	15.5	4.8	3.0	3.9	9.4	8.7	9.0
21	14.7	14.1	14.3	15.0	13.3	14.1	6.6	4.8	5.7	8.7	7.8	8.2
22	14.2	13.1	13.7	13.2	12.2	12.6	8.2	6.6	7.3	7.9	6.8	7.4
23	13.8	12.5	13.2	12.9	12.2	12.5	9.9	8.2	9.3	7.5	6.0	6.9
24	14.5	13.4	13.8	12.2	11.3	11.7	11.1	9.8	10.5	7.6	6.5	7.2
25	13.5	12.3	13.0	12.4	10.9	11.6	10.6	9.1	9.9	8.0	6.8	7.5
26	13.0	12.4	12.7	14.7	12.3	12.9	18.5	8.3	8.8	8.5	7.5	8.0
27	14.1	12.5	13.2	14.9	13.7	14.0	9.5	8.5	9.0	9.7	8.6	9.0
28	14.0	13.3	13.6	13.7	11.5	12.7	10.4	9.0	9.9	8.9	7.7	8.4
29	15.3	13.9	14.5	11.5	9.9	10.6	9.0	7.3	7.9	9.3	8.4	8.9
30	15.0	14.2	14.6	10.1	9.3	9.7	7.8	7.3	7.6	10.6	9.3	10.1
31	14.6	13.9	14.3	---	---	---	9.4	7.8	8.6	10.4	9.0	9.8
MONTH	22.2	11.3	15.1	17.8	9.3	13.0	18.5	2.3	7.0	12.1	6.0	9.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.4	9.7	10.5	9.4	9.1	9.3	14.5	13.0	13.9	22.1	20.9	21.5
2	12.8	11.4	12.1	9.5	8.8	9.1	14.7	12.7	13.7	21.2	19.7	20.4
3	13.4	12.5	13.0	10.3	9.4	9.8	15.2	14.3	14.7	20.0	18.8	19.2
4	12.5	10.5	11.3	12.4	10.3	11.0	16.0	14.9	15.5	18.8	17.9	18.4
5	10.5	9.6	10.0	12.8	11.5	12.2	15.1	14.4	14.8	18.1	17.6	17.8
6	9.6	8.4	9.2	12.8	10.4	11.7	14.6	13.5	13.9	18.5	17.2	17.8
7	8.4	7.3	7.7	10.3	8.8	9.5	14.1	12.9	13.5	18.2	16.5	17.4
8	7.5	6.7	7.1	9.7	8.5	9.1	13.9	13.1	13.4	18.2	15.9	17.2
9	6.9	5.6	6.4	10.4	8.5	9.5	13.5	12.6	12.9	18.4	17.8	18.2
10	5.7	4.7	5.3	11.3	9.4	10.4	12.6	11.8	12.2	18.6	17.9	18.3
11	6.0	4.5	5.3	12.4	10.3	11.4	12.4	8.2	11.5	18.5	16.6	17.6
12	7.4	5.1	6.2	13.4	11.4	12.4	12.5	10.9	11.8	18.3	16.5	17.4
13	9.1	6.7	7.7	14.3	12.3	13.4	13.8	11.6	12.6	17.8	17.1	17.5
14	11.6	9.1	10.2	16.4	13.4	14.9	14.1	12.5	13.3	17.6	16.9	17.2
15	13.7	11.6	12.6	17.2	15.4	16.3	14.6	13.6	14.2	19.0	16.9	17.8
16	14.1	13.1	13.6	16.9	15.5	16.3	15.9	13.7	14.7	19.8	17.8	18.7
17	13.6	11.9	12.9	17.1	15.1	16.2	16.8	14.1	15.5	21.0	18.4	19.6
18	11.9	10.0	10.9	17.8	16.2	17.0	18.0	15.2	16.7	20.8	19.6	20.2
19	10.0	9.4	9.7	17.0	15.7	16.5	18.0	16.6	17.4	21.8	19.7	20.7
20	10.3	9.5	9.8	17.2	15.9	16.6	18.5	16.5	17.6	21.5	20.9	21.3
21	11.3	10.3	10.9	17.3	14.3	15.8	19.2	17.4	18.3	22.8	20.4	21.5
22	10.9	9.1	10.2	14.3	12.8	13.4	19.5	17.5	18.6	23.0	21.9	22.4
23	9.1	6.3	7.6	12.8	11.5	11.9	20.2	18.3	19.2	24.1	21.8	22.8
24	6.2	5.1	5.7	12.0	11.1	11.5	21.0	19.3	20.1	25.0	22.6	23.7
25	6.4	4.3	5.4	12.5	11.5	12.0	21.6	19.9	20.6	25.9	23.3	24.5
26	7.6	5.9	6.7	14.3	12.0	13.1	22.1	20.2	21.1	26.6	24.5	25.5
27	8.7	7.6	7.9	15.5	13.5	14.5	22.7	20.6	21.6	26.4	25.0	25.8
28	9.6	8.5	9.1	16.8	14.8	15.8	23.5	21.0	22.1	25.8	24.2	25.1
29	---	---	---	18.0	15.9	15.9	23.2	21.8	22.4	25.3	23.3	24.4
30	---	---	---	16.5	15.7	16.0	22.8	21.4	22.1	25.6	23.8	24.8
31	---	---	---	15.7	14.5	15.2	---	---	---	26.3	24.3	25.4
MONTH	14.1	4.3	9.1	18.0	8.5	13.2	23.5	8.2	16.3	26.6	15.9	20.6

02423380 CAHABA RIVER NEAR MOUNTAIN BROOK, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.8	25.1	26.0	24.7	23.4	24.4	27.5	26.3	26.8	27.2	26.4	26.8
2	26.6	25.3	26.1	23.4	21.1	21.8	27.7	26.3	27.0	26.7	25.7	26.3
3	---	---	---	21.5	20.8	21.1	27.8	26.1	27.0	27.1	25.3	26.3
4	---	---	---	21.7	21.0	21.3	28.9	26.6	27.7	27.1	25.9	26.5
5	---	---	---	21.5	21.1	21.3	28.8	26.8	27.9	26.7	25.1	26.1
6	---	---	---	22.1	21.0	21.5	28.7	27.1	27.9	26.1	25.1	25.6
7	---	---	---	23.0	21.7	22.3	27.7	26.6	27.2	25.8	24.5	25.2
8	---	---	---	24.0	22.8	23.2	26.7	25.2	26.0	25.9	24.5	25.3
9	---	---	---	23.9	23.0	23.4	25.3	23.7	24.6	26.3	24.7	25.5
10	---	---	---	24.3	22.8	23.6	25.3	23.6	24.5	26.3	25.4	25.9
11	---	---	---	24.6	23.2	23.9	25.0	23.5	24.4	25.7	24.5	25.2
12	---	---	---	25.4	23.3	24.3	24.6	23.3	24.1	25.9	24.6	25.2
13	---	---	---	25.7	24.1	24.9	24.8	23.0	24.0	26.2	24.7	25.5
14	---	---	---	25.5	24.7	25.1	24.8	23.6	24.2	26.4	25.0	25.8
15	---	---	---	25.8	24.7	25.3	25.0	23.6	24.3	25.8	24.6	25.3
16	---	---	---	25.5	24.8	25.1	25.0	23.8	24.4	24.6	23.2	23.7
17	---	---	---	25.9	24.1	24.9	24.6	22.5	24.1	23.4	22.1	22.8
18	---	---	---	25.6	24.4	25.0	25.7	23.6	24.6	23.0	21.5	22.3
19	---	---	---	26.0	24.5	25.2	26.0	24.2	25.2	22.6	21.1	21.9
20	---	---	---	26.2	25.1	25.6	26.2	24.8	25.6	22.2	20.8	21.5
21	---	---	---	25.9	25.1	25.5	27.0	25.1	26.1	22.1	21.0	21.6
22	---	---	---	25.3	24.6	25.0	27.5	25.8	26.7	22.3	21.7	21.9
23	21.4	19.9	20.5	25.7	24.2	24.8	28.1	26.2	27.2	21.7	20.0	21.0
24	22.0	20.8	21.4	25.7	24.5	25.0	28.4	26.4	27.4	20.0	18.4	19.0
25	23.3	21.7	22.4	26.7	24.6	25.6	28.3	26.6	27.4	18.4	17.4	17.8
26	24.7	23.0	23.8	27.9	25.7	26.7	28.1	26.6	27.4	18.2	17.3	17.8
27	25.5	23.5	24.5	28.2	26.3	27.2	28.2	26.4	27.4	19.0	17.9	18.4
28	25.6	24.4	25.1	28.3	26.4	27.4	28.5	26.6	27.7	18.9	17.8	18.4
29	25.7	24.5	25.1	28.5	26.3	27.4	28.6	26.9	27.8	17.9	17.5	17.7
30	25.4	24.7	25.1	27.6	26.4	26.9	28.0	27.2	27.7	18.7	17.9	18.2
31	---	---	---	27.7	26.3	27.0	27.7	26.5	27.2	---	---	---
MONTH	---	---	---	28.5	20.8	24.6	28.9	22.5	26.2	27.2	17.3	23.0

02423390 CAHABA RIVER AT BWWB PUMP STATION NEAR CAHABA HEIGHTS, AL

LOCATION.--Lat 33°27'05", long 86°42'54", in SE¼ sec. 23, T. 18 S., R. 2 W., Jefferson County, Hydrologic Unit 03150202, on right bank at Birmingham Water Works Board raw water intake, 0.2 mi upstream from Fleming Branch, 1.3 mi southeast of Cahaba Heights, 2.0 mi upstream from Little Cahaba River, and at mile 150.2.

DRAINAGE AREA.--145 mi².

WATER-STAGE RECORDS

PERIOD OF RECORD.--June 1984 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 400.49 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-stage records good. Stage affected by releases from Lake Purdy Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 39.60 ft, Mar. 5, 1989; minimum, 26.36 ft, Nov. 18, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 39.60 ft, Mar. 5; minimum, 27.47 ft, Aug. 17.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.36	28.09	28.81	30.33	28.73	30.73	29.57	28.59	27.90	29.00	28.33	28.03
2	29.20	28.08	28.70	29.55	28.71	29.77	29.26	28.71	27.77	34.14	28.19	27.99
3	28.83	28.00	28.61	29.32	28.69	29.43	29.14	28.53	27.87	32.72	28.40	27.94
4	28.68	28.19	28.56	29.55	28.67	31.82	29.77	28.46	27.89	30.95	28.28	27.87
5	28.50	28.99	28.90	29.21	28.74	36.78	32.31	28.71	28.24	31.06	27.96	27.84
6	28.32	28.78	28.44	29.10	28.94	31.89	30.39	29.06	28.32	30.32	28.01	27.80
7	27.93	28.55	28.38	29.04	29.52	30.36	29.77	28.78	28.40	29.88	28.15	28.10
8	27.93	28.42	28.38	28.97	29.48	29.67	29.52	28.63	28.19	29.49	28.28	27.98
9	27.81	28.33	28.26	28.99	29.19	29.37	30.20	28.55	28.45	29.34	27.96	27.98
10	28.01	28.12	28.15	29.54	29.02	29.15	29.65	28.62	28.37	29.29	27.92	27.98
11	28.04	28.01	27.91	29.93	28.93	29.03	29.37	28.59	28.21	29.01	28.04	28.17
12	28.02	28.18	28.07	30.85	28.85	28.97	29.18	28.46	28.31	28.85	28.04	28.05
13	27.93	28.41	28.25	33.46	28.77	28.91	29.04	28.40	27.97	28.79	28.03	28.05
14	28.11	28.47	28.16	31.22	28.73	28.85	28.94	28.45	28.12	28.70	28.02	27.86
15	28.13	28.36	28.14	30.58	28.69	28.80	29.02	28.51	29.68	28.63	28.16	28.10
16	27.73	28.18	28.11	29.97	28.66	28.73	28.96	28.46	30.40	28.58	27.94	27.96
17	27.85	28.05	28.25	29.54	28.62	28.66	28.85	28.35	29.18	28.55	28.16	27.97
18	28.06	28.16	28.01	29.32	28.64	28.64	28.77	28.22	28.82	28.49	28.23	28.04
19	27.99	27.72	27.92	29.23	28.68	28.61	28.73	28.00	28.92	28.51	27.85	28.00
20	27.79	30.97	27.92	29.02	28.69	28.60	28.74	28.15	29.41	28.62	28.01	28.00
21	28.05	29.94	28.14	28.81	29.30	29.99	28.67	28.58	33.92	28.58	27.96	28.07
22	27.83	29.09	28.10	28.78	29.34	29.92	28.61	28.45	31.85	28.50	27.89	28.88
23	28.07	28.85	28.51	28.75	29.09	30.10	28.58	28.41	30.95	28.57	28.08	28.46
24	28.16	28.72	28.73	28.72	28.93	30.28	28.53	28.34	29.66	28.63	27.93	28.13
25	27.88	28.63	28.61	28.69	28.84	29.65	28.48	28.09	29.19	28.54	28.08	28.27
26	27.82	28.61	28.53	28.68	28.81	29.33	28.45	28.05	28.93	28.47	28.03	28.96
27	28.14	29.36	28.47	28.67	28.81	29.12	28.42	28.13	28.76	28.42	28.09	28.54
28	28.10	29.53	28.50	28.64	32.01	28.98	28.39	28.19	28.66	28.29	28.12	28.29
29	28.18	29.18	28.53	28.62	---	29.12	28.35	27.86	28.60	28.28	28.00	28.10
30	28.11	28.95	28.55	28.73	---	31.84	28.32	28.10	28.63	28.29	27.92	28.56
31	28.14	---	29.84	28.81	---	30.30	---	27.92	---	28.51	28.27	---
MEAN	28.12	28.63	28.39	29.44	29.00	29.85	29.13	28.40	28.99	29.23	28.08	28.13
MAX	29.20	30.97	29.84	33.46	32.01	36.78	32.31	29.06	33.92	34.14	28.40	28.96
MIN	27.73	27.72	27.91	28.62	28.62	28.60	28.32	27.86	27.77	28.28	27.85	27.80

CAL YR 1988 MEAN 28.39 MAX 32.17 MIN 27.72
WTR YR 1989 MEAN 28.78 MAX 36.78 MIN 27.72

02423390 CAHABA RIVER AT BWWB PUMP STATION NEAR CAHABA HEIGHTS, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1986 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1986 to current year.
WATER TEMPERATURE: November 1986 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1986.

REMARKS.--Miscellaneous samples of chemical data published for water year 1987. Interruptions in the daily record are due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 448 microsiemens, July 26, 1988; minimum, 52 microsiemens, Mar. 4, 1989.
WATER TEMPERATURE: Maximum, 29.1°C, July 21, 1988; minimum, 3.3°C, Jan. 16, 1988.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 330 microsiemens, Dec. 23; minimum, 52 microsiemens, Mar. 4.
WATER TEMPERATURE: Maximum, 28.0°C, July 27; minimum, 4.5°C, Feb. 11.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	268	155	235	---	---	---	136	101	120	128	121	126
2	230	151	205	---	---	---	161	121	142	143	127	135
3	271	218	242	---	---	---	171	120	146	149	135	144
4	238	188	203	---	---	---	193	139	159	164	148	158
5	254	224	238	---	---	---	190	156	170	175	161	169
6	268	254	264	---	---	---	185	160	179	181	174	178
7	269	261	265	---	---	---	194	171	184	197	181	186
8	---	---	---	---	---	---	199	156	183	204	190	198
9	---	---	---	---	---	---	176	151	167	210	198	204
10	---	---	---	---	---	---	189	154	167	219	199	206
11	---	---	---	---	---	---	183	142	161	204	163	187
12	---	---	---	---	---	---	178	146	163	161	147	150
13	---	---	---	---	---	---	184	148	169	204	149	177
14	---	---	---	---	---	---	208	153	175	229	205	220
15	---	---	---	---	---	---	208	163	186	231	228	230
16	---	---	---	248	232	240	302	199	252	229	225	228
17	---	---	---	248	233	240	314	302	311	226	223	225
18	---	---	---	239	191	203	319	312	315	224	218	222
19	---	---	---	226	196	207	321	316	318	219	200	211
20	---	---	---	225	112	150	325	322	324	200	182	190
21	---	---	---	148	81	116	327	264	303	187	174	181
22	303	288	298	126	82	101	269	259	262	174	162	168
23	303	232	260	128	95	100	330	224	253	193	155	168
24	241	236	238	131	99	107	232	227	230	200	165	186
25	240	236	238	134	109	113	233	229	232	202	163	170
26	242	238	240	142	104	124	242	233	239	173	166	169
27	243	239	242	137	57	103	242	234	239	171	168	169
28	240	235	237	136	95	111	235	229	232	178	171	175
29	239	231	235	123	96	106	236	231	234	180	174	177
30	---	---	---	130	101	115	234	228	233	178	165	173
31	---	---	---	---	---	---	229	113	171	179	172	175
MONTH	---	---	---	---	---	---	330	101	214	231	121	182

02423390 CAHABA RIVER AT BWWB PUMP STATION NEAR CAHABA HEIGHTS, AL--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	181	169	176	94	82	89	104	93	98	212	175	185
2	222	159	186	97	88	93	109	102	106	192	183	188
3	267	217	227	103	97	100	115	108	112	188	180	184
4	224	166	205	108	52	91	120	99	112	181	166	171
5	170	163	168	80	66	74	104	79	88	178	124	161
6	166	163	165	87	73	80	91	79	85	187	139	158
7	167	148	156	99	87	92	100	91	96	154	136	144
8	151	134	145	108	98	104	108	99	104	140	134	137
9	134	131	133	115	108	112	108	99	103	134	130	133
10	143	134	138	122	114	118	105	99	101	132	129	130
11	146	142	144	127	121	125	111	103	108	179	131	148
12	148	137	144	133	126	130	118	110	114	178	134	154
13	156	138	141	138	133	136	124	117	121	157	144	147
14	143	139	140	143	137	140	129	123	126	151	145	149
15	185	134	144	147	142	145	131	128	129	149	144	147
16	145	140	143	150	146	148	137	131	135	157	148	152
17	152	145	148	154	150	152	140	135	137	158	140	150
18	160	152	156	159	154	157	141	137	139	195	139	163
19	165	160	163	161	157	159	141	137	139	225	190	210
20	174	164	169	166	160	163	148	139	143	229	152	196
21	170	111	154	164	104	130	155	148	152	169	136	155
22	158	148	153	128	108	118	155	152	154	177	167	172
23	148	140	144	110	102	106	159	152	156	185	168	175
24	---	---	---	104	96	100	163	157	160	220	184	197
25	---	---	---	101	96	98	166	161	163	230	199	213
26	---	---	---	107	100	104	170	165	167	234	205	225
27	---	---	---	113	107	110	172	163	168	234	197	214
28	---	---	---	120	113	117	173	157	168	210	185	195
29	---	---	---	126	98	121	182	161	171	218	188	196
30	---	---	---	108	85	95	211	182	196	211	186	192
31	---	---	---	94	86	90	---	---	---	218	188	196
MONTH	---	---	---	166	52	116	211	79	132	234	124	172
		JUNE			JULY			AUGUST			SEPTEMBER	
1	221	190	198	171	152	163	215	200	208	265	249	262
2	215	196	203	166	76	107	210	202	201	262	242	251
3	228	200	209	82	75	78	215	204	212	251	242	246
4	221	204	208	116	77	90	215	206	212	256	243	252
5	211	196	205	98	81	92	217	205	211	268	253	260
6	199	187	192	107	97	103	221	217	219	275	265	270
7	208	200	205	122	107	116	233	217	226	285	266	276
8	213	194	207	131	112	120	231	227	229	284	269	280
9	208	180	194	132	116	128	239	228	233	276	258	266
10	205	198	200	136	117	131	256	239	249	276	254	267
11	208	199	203	172	131	143	254	247	251	290	251	277
12	208	197	202	200	149	162	248	243	246	274	261	265
13	199	192	196	213	156	173	247	241	243	276	260	268
14	203	179	196	193	174	182	246	241	243	271	258	264
15	192	120	161	234	186	209	246	240	243	269	263	267
16	147	110	117	279	235	259	250	242	246	264	248	256
17	121	109	114	280	196	231	248	209	245	261	240	246
18	119	112	116	202	196	199	---	---	---	264	243	255
19	126	96	120	200	193	196	227	204	219	264	253	261
20	145	113	124	194	180	190	219	202	210	267	264	265
21	124	75	93	200	192	196	241	214	227	269	245	264
22	98	81	93	209	199	205	246	231	238	250	154	204
23	129	88	104	208	204	206	252	241	247	238	174	210
24	142	130	137	209	194	201	257	240	252	243	227	236
25	153	140	148	198	191	194	256	243	251	231	198	219
26	158	151	154	200	187	194	252	237	247	208	150	174
27	154	150	152	209	200	204	251	222	239	222	183	197
28	156	151	154	213	201	210	272	249	260	184	172	178
29	160	154	157	216	207	212	272	249	263	278	175	179
30	163	154	161	218	202	215	267	246	260	184	171	179
31	---	---	---	216	200	209	264	237	253	---	---	---
MONTH	228	75	164	280	75	172	---	---	---	290	150	243

02423390 CAHABA RIVER AT BWWB PUMP STATION NEAR CAHABA HEIGHTS, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	22.1	21.0	21.7	---	---	---	9.7	8.6	9.1	10.6	9.7	10.2
2	21.1	20.7	20.9	---	---	---	8.6	7.7	8.1	10.3	9.7	10.1
3	21.2	20.5	20.8	---	---	---	7.7	7.0	7.3	11.4	10.1	10.7
4	20.5	19.1	19.6	---	---	---	7.7	6.8	7.2	10.7	9.2	10.0
5	19.1	18.0	18.3	---	---	---	7.2	6.3	6.8	9.2	8.3	8.6
6	18.0	16.4	16.9	---	---	---	6.9	5.9	6.4	10.5	8.5	9.6
7	17.2	16.0	16.4	---	---	---	7.4	6.2	6.7	11.9	10.3	10.9
8	---	---	---	---	---	---	7.9	6.7	7.2	12.4	11.9	12.3
9	---	---	---	---	---	---	7.9	7.5	7.7	11.9	10.0	10.9
10	---	---	---	---	---	---	7.7	6.9	7.2	10.0	9.7	9.8
11	---	---	---	---	---	---	7.1	6.6	6.8	10.7	9.8	10.2
12	---	---	---	---	---	---	6.6	6.2	6.4	12.4	10.7	11.4
13	---	---	---	---	---	---	6.2	5.5	5.8	12.3	11.4	11.9
14	---	---	---	---	---	---	6.0	5.3	5.7	11.5	11.2	11.3
15	---	---	---	14.6	13.0	13.0	6.5	5.9	6.1	11.5	11.0	11.3
16	---	---	---	14.8	14.4	14.6	8.7	6.5	6.7	11.0	10.0	10.6
17	---	---	---	14.8	13.6	14.1	6.6	5.8	6.3	10.0	8.6	9.2
18	---	---	---	13.6	12.3	12.8	6.6	5.7	6.2	8.6	7.9	8.3
19	---	---	---	14.0	12.9	13.2	6.5	5.7	6.1	8.7	7.9	8.3
20	---	---	---	17.2	14.0	15.9	6.8	5.7	6.3	9.6	8.7	9.1
21	---	---	---	15.5	13.8	14.7	8.1	6.5	7.1	9.0	7.9	8.4
22	17.3	15.7	16.6	13.8	12.8	13.1	9.4	7.6	8.4	8.0	7.0	7.6
23	16.9	15.2	16.2	13.4	12.7	13.0	10.9	8.7	9.8	7.4	6.6	7.1
24	16.7	15.4	16.2	12.8	11.8	12.3	11.3	10.2	10.7	7.7	7.1	7.4
25	16.7	15.8	16.3	12.5	11.7	12.0	11.0	9.8	10.4	8.4	7.0	7.6
26	16.4	15.8	16.1	14.2	12.3	13.1	9.8	8.5	9.0	8.7	7.4	8.1
27	16.4	15.7	16.0	15.1	14.0	14.6	10.1	8.5	9.1	9.9	8.6	9.2
28	17.2	16.2	16.7	14.0	12.1	13.2	10.6	9.9	10.2	9.3	8.1	8.7
29	17.6	16.7	17.2	12.1	10.6	11.1	9.9	7.9	8.5	10.0	8.3	9.0
30	---	---	---	10.6	9.7	10.2	7.9	7.4	7.6	11.4	9.5	10.3
31	---	---	---	---	---	---	9.7	7.9	8.8	10.7	9.7	10.2
MONTH	---	---	---	---	---	---	11.3	5.3	7.6	12.4	6.6	9.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.7	9.9	10.7	10.0	9.4	9.7	14.9	13.6	14.4	23.0	21.5	22.1
2	13.6	11.5	12.6	9.9	9.3	9.6	14.8	13.3	14.1	21.6	20.6	21.1
3	13.9	12.1	13.4	10.8	9.9	10.2	15.7	14.6	15.1	20.7	19.4	19.9
4	13.1	10.9	11.9	13.2	10.7	11.5	16.4	15.4	15.9	19.8	18.6	18.9
5	10.9	9.6	10.2	13.2	12.0	12.6	15.4	14.9	15.2	18.7	18.0	18.3
6	9.7	8.8	9.4	13.2	11.0	12.3	15.0	14.0	14.3	19.1	17.6	18.2
7	8.7	7.3	7.9	11.0	9.4	10.1	14.5	13.3	14.0	18.7	17.0	17.9
8	7.6	6.8	7.2	10.1	9.0	9.6	14.2	13.6	13.8	18.7	17.0	17.7
9	7.0	5.8	6.4	10.6	9.1	10.0	13.9	13.1	13.4	19.2	18.1	18.6
10	5.9	4.7	5.4	11.6	10.0	10.8	13.0	12.2	12.6	19.2	18.4	18.8
11	6.2	4.5	5.3	12.8	10.7	11.7	12.8	11.3	12.1	19.0	17.1	18.1
12	7.2	5.4	6.2	13.8	11.7	12.7	13.2	11.4	12.2	19.1	16.9	17.9
13	8.7	7.1	7.6	14.7	12.8	13.7	14.1	12.0	13.0	19.0	17.2	17.9
14	11.7	8.7	10.3	16.4	14.2	15.1	14.2	12.9	13.7	18.3	17.1	17.7
15	14.3	11.5	12.8	17.4	16.3	16.7	15.0	14.1	14.5	19.5	17.3	18.0
16	14.8	13.4	14.0	17.5	16.4	16.9	16.3	14.0	15.1	20.4	18.3	19.1
17	14.3	12.6	13.5	17.7	15.7	16.7	17.0	15.0	15.9	20.9	19.2	19.9
18	12.6	10.3	11.4	18.6	16.5	17.4	18.2	16.3	17.0	21.2	20.3	20.7
19	10.3	9.7	9.9	17.8	16.3	17.0	18.5	17.4	17.8	22.3	20.7	21.2
20	12.5	9.7	10.0	18.2	16.2	17.0	19.1	17.2	18.0	22.7	20.9	21.9
21	13.2	10.4	11.4	17.6	14.7	16.2	19.8	17.9	18.7	23.1	20.8	21.6
22	11.3	9.6	10.5	14.7	13.2	13.8	20.3	18.0	19.0	23.2	22.0	22.5
23	9.5	6.6	7.9	13.2	11.9	12.4	21.1	18.6	19.6	24.0	22.5	23.2
24	---	---	---	12.4	11.6	12.0	21.7	19.5	20.3	24.9	23.1	23.8
25	---	---	---	12.8	11.9	12.4	22.1	20.0	20.9	26.0	24.2	24.9
26	---	---	---	14.5	12.5	13.4	22.5	20.5	21.3	27.0	25.0	25.8
27	---	---	---	15.9	13.9	14.9	22.7	21.2	21.9	27.2	25.6	26.2
28	---	---	---	17.2	15.2	16.1	23.4	21.8	22.4	26.4	24.4	25.5
29	---	---	---	18.3	16.3	17.2	23.5	22.5	22.9	25.5	24.1	24.7
30	---	---	---	17.1	16.2	16.5	23.2	22.4	22.7	25.3	24.0	24.7
31	---	---	---	16.2	14.9	15.6	---	---	---	26.2	24.5	25.2
MONTH	---	---	---	18.6	9.0	13.6	23.5	11.3	16.7	27.2	16.9	21.0

02423390 CAHABA RIVER AT BWWB PUMP STATION NEAR CAHABA HEIGHTS, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	26.4	22.5	25.6	24.9	24.0	24.6	23.2	21.7	22.2	22.2	21.2	21.8
2	26.7	25.0	25.7	24.2	21.4	22.3	23.0	22.0	22.5	22.1	20.9	21.5
3	26.2	22.0	24.9	21.8	21.1	21.4	22.8	21.9	22.3	22.0	20.8	21.3
4	25.6	21.2	24.6	22.0	21.3	21.7	23.6	22.1	22.6	22.3	20.5	21.7
5	24.7	23.6	24.1	21.8	21.0	21.6	24.0	22.7	23.2	24.8	20.0	21.2
6	24.1	22.9	23.5	22.4	21.4	21.8	24.1	22.9	23.3	24.9	20.0	22.2
7	25.3	23.4	24.1	23.2	22.1	22.6	23.3	22.0	22.7	24.9	20.0	22.9
8	25.3	23.4	24.1	24.0	23.1	23.4	22.5	20.6	21.4	24.9	20.0	23.0
9	23.9	22.8	23.3	24.3	23.2	23.7	24.9	20.0	22.2	24.8	20.0	21.8
10	24.4	23.0	23.5	24.6	23.4	23.9	24.9	20.0	24.0	24.9	20.0	22.5
11	24.4	23.2	23.5	25.0	23.5	24.2	24.9	23.5	24.2	24.9	20.0	22.1
12	24.4	22.9	23.4	25.6	23.8	24.6	24.7	23.0	23.8	24.9	20.0	22.5
13	25.7	24.0	24.7	25.7	24.5	25.1	24.6	22.4	23.3	24.9	20.0	20.4
14	25.9	22.9	25.2	25.7	25.2	25.5	24.8	22.4	23.4	24.9	20.0	22.3
15	25.4	22.4	23.7	26.2	24.9	25.5	24.9	22.3	23.5	24.9	20.0	23.8
16	22.4	21.6	21.9	26.0	25.0	25.5	24.4	22.4	23.5	24.1	22.8	23.6
17	22.6	21.2	21.9	26.1	24.5	25.2	24.9	20.0	23.7	23.9	21.4	22.7
18	23.7	21.8	22.7	26.0	24.9	25.3	24.9	20.0	24.0	23.3	20.0	21.3
19	23.4	22.5	23.0	26.2	25.0	25.5	24.9	20.0	22.2	23.2	19.9	20.8
20	22.9	21.9	22.4	26.9	25.0	25.9	24.9	20.0	20.9	22.6	19.9	20.8
21	22.4	20.3	20.9	26.4	25.4	25.9	21.6	20.0	20.5	22.1	20.2	20.7
22	20.9	20.5	20.7	26.3	25.3	25.6	21.7	20.1	20.6	22.7	21.8	22.2
23	21.5	20.3	20.8	26.0	24.6	25.1	22.3	20.1	20.7	22.2	21.1	21.7
24	22.2	21.2	21.7	26.0	25.0	25.4	22.4	20.8	21.3	21.1	19.3	19.8
25	23.6	22.0	22.7	26.9	25.1	25.8	24.8	20.0	21.2	19.6	17.6	18.7
26	25.0	23.1	23.9	27.9	26.1	26.7	24.7	20.1	22.0	18.6	17.8	18.2
27	25.4	23.9	24.6	28.0	22.9	26.5	24.9	20.0	21.7	19.4	18.5	18.8
28	25.7	24.8	25.2	23.4	22.0	22.9	22.5	20.0	21.6	19.4	18.8	19.0
29	25.9	24.8	25.3	23.5	22.4	22.9	24.4	20.0	21.5	18.8	18.1	18.4
30	25.8	24.8	25.3	23.4	21.9	22.6	24.5	20.1	21.3	19.0	18.0	18.5
31	---	---	---	23.3	21.6	22.2	24.9	20.0	21.6	---	---	---
MONTH	26.7	20.3	23.6	28.0	21.0	24.2	24.9	20.0	22.4	24.9	17.6	21.2

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL

LOCATION.--Lat 33°31'27", long 86°34'32", in SE¼ sec. 30, T. 17 S., R. 1 E., Jefferson County, Hydrologic Unit 03150202, near left bank on downstream side of bridge on county road, 1.2 mi downstream from Dry Creek, 2.0 mi southwest of Leeds, and 12.8 mi upstream from mouth.

DRAINAGE AREA.--19.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1976 to September 1980 (gage heights and discharge measurements in files of Barton Laboratories), October 1980 to September 1981, May 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 586.84 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharge: May 17, 1989 to June 1, 1989. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft³/s, July 1, 1989, gage height, 9.60 ft; minimum daily discharge, 4.4 ft³/s, July 10, 1988.

EXTREMES FOR CURRENT PERIOD.--May to September 1988. Peak discharges greater than base of 850 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 16	2115	*820	*7.06				

Minimum daily discharge, 4.4 ft³/s, July 10.

Water year 1989: Peak discharges greater than base of 850 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 4	2200	1,420	9.03	July 2	0930	924	7.57
July 1	2300	*1,680	9.60	July 4	1930	952	7.69

Minimum daily discharge, 6.1 ft³/s, Nov. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	12	8.4	4.8	7.0	7.2
2	---	---	---	---	---	---	---	10	6.0	6.5	7.5	6.6
3	---	---	---	---	---	---	---	8.4	6.0	9.6	8.6	6.4
4	---	---	---	---	---	---	---	9.2	5.8	7.4	7.7	23
5	---	---	---	---	---	---	---	11	6.2	6.7	6.6	14
6	---	---	---	---	---	---	---	10	8.1	5.1	7.8	7.7
7	---	---	---	---	---	---	---	9.6	5.9	5.9	5.9	8.1
8	---	---	---	---	---	---	---	9.0	5.6	7.4	7.4	8.3
9	---	---	---	---	---	---	---	7.1	5.9	5.0	6.2	6.7
10	---	---	---	---	---	---	---	28	5.6	4.4	5.4	7.1
11	---	---	---	---	---	---	---	14	7.5	14	6.0	9.2
12	---	---	---	---	---	---	---	15	5.3	16	5.4	95
13	---	---	---	---	---	---	---	12	5.8	8.1	5.1	21
14	---	---	---	---	---	---	---	10	5.9	8.4	5.8	13
15	---	---	---	---	---	---	---	8.5	7.7	7.7	6.1	12
16	---	---	---	---	---	---	---	10	5.4	20	5.3	239
17	---	---	---	---	---	---	---	9.9	5.9	10	4.8	216
18	---	---	---	---	---	---	---	12	5.0	9.0	4.7	62
19	---	---	---	---	---	---	---	11	4.9	6.5	6.4	34
20	---	---	---	---	---	---	---	7.3	7.9	8.8	5.1	30
21	---	---	---	---	---	---	---	9.1	5.2	6.7	10	24
22	---	---	---	---	---	---	---	8.1	8.2	131	9.3	20
23	---	---	---	---	---	---	---	9.9	4.9	38	7.6	16
24	---	---	---	---	---	---	---	11	5.0	13	8.1	16
25	---	---	---	---	---	---	---	11	6.7	11	6.0	14
26	---	---	---	---	---	---	---	8.5	6.1	17	5.2	12
27	---	---	---	---	---	---	---	9.2	4.7	9.4	5.1	14
28	---	---	---	---	---	---	---	7.8	4.5	11	6.3	12
29	---	---	---	---	---	---	---	6.8	5.8	7.1	4.7	13
30	---	---	---	---	---	---	---	7.8	4.6	9.2	4.8	11
31	---	---	---	---	---	---	---	9.1	---	7.1	5.6	---
TOTAL	---	---	---	---	---	---	---	322.3	180.5	431.8	197.5	978.3
MEAN	---	---	---	---	---	---	---	10.4	6.02	13.9	6.37	32.6
MAX	---	---	---	---	---	---	---	28	8.4	131	10	239
MIN	---	---	---	---	---	---	---	6.8	4.5	4.4	4.7	6.4
CFSM	---	---	---	---	---	---	---	.54	.31	.72	.33	1.68
IN.	---	---	---	---	---	---	---	.62	.35	.83	.38	1.88

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	7.4	26	74	21	78	59	26	e8.4	303	22	12
2	71	9.2	25	46	19	57	48	20	8.6	757	22	14
3	32	6.1	22	60	20	50	45	18	11	201	20	14
4	25	18	21	46	17	382	160	18	14	328	19	11
5	20	38	18	38	26	691	176	40	20	235	16	11
6	18	15	19	38	30	267	82	28	22	173	15	9.8
7	16	12	18	32	68	124	67	20	14	104	16	9.5
8	13	12	17	31	40	83	98	18	16	63	15	8.4
9	13	11	16	39	34	62	110	17	19	103	15	9.7
10	12	10	13	60	30	53	75	28	14	78	13	32
11	12	9.0	14	63	29	46	55	18	14	52	13	20
12	11	9.8	13	95	28	40	49	16	13	43	13	15
13	8.9	23	12	195	26	36	42	16	13	38	12	21
14	10	13	11	105	25	34	37	18	17	34	11	12
15	9.9	12	12	104	24	33	46	20	60	34	14	12
16	8.0	13	11	69	23	30	35	18	35	34	13	11
17	9.4	11	11	54	23	28	31	e15	26	32	12	9.7
18	8.3	11	9.2	46	23	27	29	e14	17	31	14	11
19	9.0	9.8	11	40	25	25	28	e14	33	32	14	10
20	8.3	275	9.8	36	28	26	28	e15	44	42	10	10
21	13	52	9.7	32	76	167	26	e16	635	30	11	25
22	9.6	38	9.3	29	41	77	23	e15	237	46	12	122
23	8.9	30	32	28	33	120	22	e15	100	44	10	31
24	9.1	24	20	25	30	87	21	e14	60	45	10	18
25	9.4	22	14	25	27	60	19	e13	46	35	11	85
26	7.8	22	15	24	27	51	19	e11	37	35	11	47
27	8.9	91	14	22	29	45	21	e11	33	31	14	27
28	8.1	48	17	21	250	38	18	e10	29	30	10	24
29	8.5	37	15	20	---	81	16	e10	28	28	12	23
30	7.7	31	17	26	---	245	23	e11	28	26	12	59
31	7.9	---	101	22	---	83	---	e9.8	---	24	11	---
TOTAL	514.7	920.3	573.0	1545	1072	3226	1508	532.8	1652.0	3091	423	724.1
MEAN	16.6	30.7	18.5	49.8	38.3	104	50.3	17.2	55.1	99.7	13.6	24.1
MAX	102	275	101	195	250	691	176	40	635	757	22	122
MIN	7.7	6.1	9.2	20	17	25	16	9.8	8.4	24	10	8.4
CFSM	.86	1.58	.95	2.57	1.97	5.36	2.59	.89	2.84	5.14	.70	1.24
IN.	.99	1.76	1.10	2.96	2.06	6.19	2.89	1.02	3.17	5.93	.81	1.39

WTR YR 1989 TOTAL 15781.9 MEAN 43.2 MAX 757 MIN 6.1 CFSM 2.23 IN. 30.26

e Estimated

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1988 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1988 to current year.
WATER TEMPERATURES: September 1988 to current year.
DISSOLVED OXYGEN: September 1988 to current year.

INSTRUMENTATION.--Water quality monitor since September 1988.

REMARKS.--Interruptions in daily record on Sept. 7, 1988 were due to installation of the instrument. Interruptions in daily record 1989 water year were due to equipment malfunctions.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 563 microsiemens, Sept. 8, 1988; minimum, 85 microsiemens, June 20, 1989.
WATER TEMPERATURE: Maximum, 24.9°C, Aug. 4, 1989; minimum, 6.1°C, Feb. 24, 1989.
DISSOLVED OXYGEN: Maximum, 12.5 mg/L, Dec. 20, 1988; minimum, 2.0 mg/L, Sept. 9, 1988.

EXTREMES FOR CURRENT YEAR.--Water year 1988:
SPECIFIC CONDUCTANCE: Maximum, 563 microsiemens, Sept. 8; minimum, 140 microsiemens, Sept. 16.
WATER TEMPERATURE: Maximum, 23.4°C, Sept. 12; minimum, 18.4°C, Sept. 8.
DISSOLVED OXYGEN: Maximum, 6.9 mg/L, Sept. 12; minimum, 2.0 mg/L, Sept. 9.

Water year 1989:
SPECIFIC CONDUCTANCE: 529 microsiemens, Nov. 4; minimum, 85 microsiemens, June 20.
WATER TEMPERATURE: Maximum, 24.9°C, Aug. 4; minimum, 6.1°C, Feb. 24.
DISSOLVED OXYGEN: Maximum, 12.5 mg/L, Dec. 20; minimum, 2.6 mg/L, June 13.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	563	407	472
9	---	---	---	---	---	---	---	---	---	506	402	434
10	---	---	---	---	---	---	---	---	---	515	398	455
11	---	---	---	---	---	---	---	---	---	493	402	450
12	---	---	---	---	---	---	---	---	---	479	154	268
13	---	---	---	---	---	---	---	---	---	451	334	387
14	---	---	---	---	---	---	---	---	---	485	399	440
15	---	---	---	---	---	---	---	---	---	511	419	454
16	---	---	---	---	---	---	---	---	---	483	140	316
17	---	---	---	---	---	---	---	---	---	285	146	218
18	---	---	---	---	---	---	---	---	---	382	277	334
19	---	---	---	---	---	---	---	---	---	426	357	389
20	---	---	---	---	---	---	---	---	---	444	402	430
21	---	---	---	---	---	---	---	---	---	464	428	447
22	---	---	---	---	---	---	---	---	---	462	434	451
23	---	---	---	---	---	---	---	---	---	496	430	446
24	---	---	---	---	---	---	---	---	---	477	429	451
25	---	---	---	---	---	---	---	---	---	498	432	454
26	---	---	---	---	---	---	---	---	---	487	424	438
27	---	---	---	---	---	---	---	---	---	510	428	462
28	---	---	---	---	---	---	---	---	---	506	433	463
29	---	---	---	---	---	---	---	---	---	491	408	449
30	---	---	---	---	---	---	---	---	---	503	430	457
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	21.6	18.4	19.8
9	---	---	---	---	---	---	---	---	---	21.5	19.6	20.4
10	---	---	---	---	---	---	---	---	---	21.3	20.7	20.9
11	---	---	---	---	---	---	---	---	---	22.8	21.0	21.9
12	---	---	---	---	---	---	---	---	---	23.4	22.1	22.6
13	---	---	---	---	---	---	---	---	---	23.2	21.2	22.0
14	---	---	---	---	---	---	---	---	---	23.0	20.8	21.9
15	---	---	---	---	---	---	---	---	---	22.9	21.1	22.2
16	---	---	---	---	---	---	---	---	---	22.9	21.5	22.4
17	---	---	---	---	---	---	---	---	---	23.1	21.8	22.2
18	---	---	---	---	---	---	---	---	---	22.4	21.1	21.7
19	---	---	---	---	---	---	---	---	---	21.8	20.0	20.9
20	---	---	---	---	---	---	---	---	---	22.8	20.7	21.6
21	---	---	---	---	---	---	---	---	---	22.9	20.1	21.5
22	---	---	---	---	---	---	---	---	---	22.4	19.4	20.9
23	---	---	---	---	---	---	---	---	---	22.7	20.0	21.2
24	---	---	---	---	---	---	---	---	---	22.7	20.6	21.7
25	---	---	---	---	---	---	---	---	---	22.4	20.5	21.5
26	---	---	---	---	---	---	---	---	---	21.5	19.7	20.5
27	---	---	---	---	---	---	---	---	---	21.9	20.2	21.0
28	---	---	---	---	---	---	---	---	---	21.6	20.1	20.7
29	---	---	---	---	---	---	---	---	---	21.4	19.8	20.5
30	---	---	---	---	---	---	---	---	---	20.9	19.7	20.5
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	4.9	2.2	3.4
9	---	---	---	---	---	---	---	---	---	4.9	2.0	3.4
10	---	---	---	---	---	---	---	---	---	4.7	3.5	4.2
11	---	---	---	---	---	---	---	---	---	6.7	3.3	4.9
12	---	---	---	---	---	---	---	---	---	6.9	4.0	5.9
13	---	---	---	---	---	---	---	---	---	6.6	5.8	6.1
14	---	---	---	---	---	---	---	---	---	6.8	4.8	5.8
15	---	---	---	---	---	---	---	---	---	6.8	4.5	5.4
16	---	---	---	---	---	---	---	---	---	6.6	4.9	5.9
17	---	---	---	---	---	---	---	---	---	6.7	6.0	6.2
18	---	---	---	---	---	---	---	---	---	6.5	5.8	6.0
19	---	---	---	---	---	---	---	---	---	6.5	5.6	5.9
20	---	---	---	---	---	---	---	---	---	6.2	5.6	5.9
21	---	---	---	---	---	---	---	---	---	6.3	5.3	5.8
22	---	---	---	---	---	---	---	---	---	6.2	5.1	5.6
23	---	---	---	---	---	---	---	---	---	5.8	5.0	5.4
24	---	---	---	---	---	---	---	---	---	5.9	4.6	5.2
25	---	---	---	---	---	---	---	---	---	6.2	4.6	5.2
26	---	---	---	---	---	---	---	---	---	5.6	4.7	5.1
27	---	---	---	---	---	---	---	---	---	5.9	4.5	5.3
28	---	---	---	---	---	---	---	---	---	5.6	4.4	5.1
29	---	---	---	---	---	---	---	---	---	5.4	4.2	4.9
30	---	---	---	---	---	---	---	---	---	5.4	3.9	4.6
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	479	162	372	511	452	478	---	---	---	286	215	253
2	378	250	321	510	439	479	---	---	---	333	282	307
3	424	366	387	499	424	453	---	---	---	334	262	298
4	447	395	419	529	349	479	---	---	---	340	277	312
5	461	417	433	363	285	313	---	---	---	376	323	347
6	466	423	440	449	371	428	---	---	---	390	344	357
7	456	426	441	481	410	440	---	---	---	397	338	363
8	477	401	440	474	418	451	---	---	---	400	351	373
9	475	422	440	481	430	456	412	392	407	388	308	359
10	476	419	440	478	426	454	424	393	407	[illegible]	264	296
11	477	419	440	465	405	436	430	396	413	316	277	303
12	478	414	437	475	410	454	430	394	413	310	207	287
13	453	397	428	422	354	386	442	406	426	240	200	219
14	466	419	445	434	369	399	447	406	425	284	241	263
15	468	416	446	478	393	414	452	419	436	289	248	267
16	466	410	441	484	406	453	450	416	432	339	273	302
17	468	394	441	453	418	429	456	432	443	337	316	330
18	469	404	443	462	425	440	461	419	444	367	322	343
19	464	405	438	---	---	---	472	429	451	376	328	352
20	488	407	447	---	---	---	514	408	453	377	349	364
21	481	404	438	---	---	---	471	391	426	393	362	377
22	495	395	436	---	---	---	473	392	427	407	368	383
23	502	392	443	---	---	---	472	255	359	413	361	388
24	504	402	447	---	---	---	412	294	351	412	383	396
25	521	424	464	---	---	---	408	353	384	410	385	395
26	495	436	462	---	---	---	435	368	412	431	394	409
27	528	437	481	---	---	---	431	382	409	408	381	394
28	493	447	461	---	---	---	448	344	400	421	385	402
29	522	447	492	---	---	---	413	371	393	425	388	406
30	521	429	479	---	---	---	424	361	395	427	359	391
31	518	441	493	---	---	---	386	175	261	429	371	393
MONTH	528	162	440	---	---	---	---	---	---	431	200	343

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	427	401	413	293	240	270	327	292	311	388	344	363
2	437	379	408	309	277	299	338	318	324	404	340	370
3	448	402	418	339	302	322	395	291	325	409	360	383
4	435	393	415	347	122	268	326	164	268	441	365	399
5	438	343	398	195	138	167	260	182	218	438	231	345
6	380	315	355	249	190	219	298	256	271	342	240	307
7	352	224	270	293	254	271	305	281	296	387	348	364
8	357	292	315	317	287	300	331	208	292	397	357	373
9	369	326	351	353	311	331	280	218	239	405	364	380
10	383	333	365	363	340	354	316	283	295	397	305	343
11	382	361	374	385	354	364	333	304	314	394	360	372
12	390	355	379	382	353	365	347	318	332	401	361	377
13	411	372	387	385	351	372	354	323	336	405	358	378
14	401	377	391	401	349	380	366	332	344	415	360	384
15	409	385	398	410	378	396	369	308	338	381	328	348
16	414	383	393	409	385	397	369	329	345	414	341	387
17	420	388	403	413	385	401	368	347	357	415	358	390
18	414	383	395	414	389	404	380	362	371	412	369	387
19	385	352	372	426	386	403	385	366	375	423	376	400
20	395	364	380	423	377	404	371	355	359	425	354	396
21	391	218	278	384	157	232	402	367	379	411	352	383
22	347	280	307	297	216	246	392	359	375	426	364	395
23	358	315	338	297	223	255	388	354	370	429	367	398
24	404	336	361	298	260	280	399	364	378	425	374	397
25	390	362	379	316	300	307	402	359	376	426	358	393
26	402	369	385	336	307	324	410	361	377	428	360	392
27	412	298	385	354	324	345	414	362	388	434	375	403
28	250	135	192	375	346	358	408	364	388	437	366	397
29	---	---	---	380	166	345	408	364	379	436	357	390
30	---	---	---	250	155	206	418	352	391	450	365	416
31	---	---	---	301	252	278	---	---	---	434	375	397
MONTH	448	135	364	426	122	318	418	164	337	450	231	381

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	422	371	385	361	150	316	---	---	---	400	351	372
2	401	369	384	199	141	170	---	---	---	379	321	346
3	466	369	399	256	202	230	---	---	---	377	319	349
4	436	308	386	258	160	229	397	343	374	393	338	356
5	386	283	344	246	187	219	404	356	388	403	338	364
6	387	314	354	261	216	242	402	357	378	403	345	356
7	410	326	371	291	245	265	400	353	374	412	353	387
8	425	351	392	312	293	303	411	353	384	385	353	365
9	426	338	368	316	203	293	405	354	382	426	359	372
10	426	347	388	320	231	291	408	352	380	434	215	359
11	432	375	402	329	321	326	411	357	386	393	280	342
12	437	367	388	336	332	334	423	358	390	411	363	387
13	429	360	392	368	332	339	413	353	379	397	310	341
14	421	223	380	400	371	383	416	353	382	406	368	383
15	284	214	251	391	379	386	414	358	389	417	369	387
16	369	225	289	384	376	380	411	332	373	432	389	410
17	388	335	366	398	373	384	418	364	389	427	393	403
18	406	347	367	394	383	391	410	358	374	445	395	421
19	417	216	364	---	---	---	411	348	387	436	392	408
20	364	85	281	---	---	---	391	346	360	473	373	421
21	177	96	129	---	---	---	419	353	390	451	240	372
22	246	160	207	---	---	---	421	362	382	348	135	237
23	298	251	276	---	---	---	412	357	385	399	329	361
24	330	298	309	---	---	---	407	366	376	413	369	388
25	342	329	335	---	---	---	424	351	377	432	190	329
26	358	340	347	---	---	---	443	349	381	352	273	311
27	363	354	359	---	---	---	428	329	360	392	338	372
28	366	354	361	---	---	---	353	330	342	436	378	404
29	368	353	361	---	---	---	410	346	380	419	381	404
30	361	345	353	---	---	---	412	343	366	402	260	315
31	---	---	---	---	---	---	448	364	405	---	---	---
MONTH	466	85	343	---	---	---	---	---	---	473	135	367

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.4	20.1	20.6	15.9	14.6	15.2	---	---	---	13.0	11.6	12.3
2	20.8	19.9	20.4	16.3	13.5	14.9	---	---	---	13.2	11.1	12.1
3	20.6	19.3	20.0	16.4	14.4	15.5	---	---	---	14.1	12.1	13.2
4	19.3	17.2	18.2	17.3	15.9	16.7	---	---	---	12.2	10.8	11.5
5	17.8	16.1	17.1	16.7	15.7	16.3	---	---	---	11.7	10.1	10.9
6	17.8	15.3	16.3	15.5	13.8	14.8	---	---	---	15.2	11.2	13.3
7	17.1	15.8	16.5	14.7	12.8	13.8	---	---	---	16.0	13.5	14.6
8	17.0	14.6	16.0	16.3	14.8	15.7	---	---	---	15.9	13.3	14.8
9	17.0	14.5	15.8	17.0	16.1	16.5	13.0	11.3	12.4	13.2	10.4	11.7
10	17.8	15.2	16.4	17.8	16.4	17.0	12.3	10.0	11.1	12.0	10.1	11.0
11	17.9	15.2	16.5	16.1	13.9	14.9	11.7	10.8	11.2	12.6	11.8	12.1
12	17.0	14.6	15.8	15.5	13.2	14.5	10.6	9.7	10.2	13.5	12.7	13.1
13	15.1	13.7	14.5	16.3	14.8	15.5	11.0	8.5	9.7	13.2	12.0	12.5
14	15.0	13.6	14.3	15.6	13.8	14.9	11.9	8.9	10.3	12.9	11.8	12.3
15	15.8	13.3	14.6	17.3	15.4	16.3	12.8	11.8	12.3	12.8	12.0	12.5
16	16.6	14.1	15.3	17.6	16.6	17.1	11.6	9.0	10.3	13.0	11.4	12.0
17	17.7	15.4	16.5	16.5	13.5	15.0	9.2	7.8	8.6	12.4	10.0	11.2
18	19.0	16.2	17.5	14.6	12.2	13.4	9.3	7.3	8.3	12.5	10.1	11.2
19	18.7	16.7	17.7	---	---	---	10.5	7.5	9.0	12.9	10.7	11.9
20	16.4	14.4	15.4	---	---	---	12.5	10.1	11.2	13.4	11.7	12.8
21	16.8	15.8	16.3	---	---	---	15.0	12.5	13.4	12.3	10.4	11.3
22	16.7	14.6	15.6	---	---	---	16.1	13.9	15.0	12.2	10.1	11.0
23	16.8	13.5	15.1	---	---	---	15.8	14.5	15.0	12.8	9.8	11.2
24	16.6	15.3	16.0	---	---	---	15.9	14.4	15.2	13.2	10.9	12.2
25	16.2	13.1	14.8	---	---	---	13.8	11.6	12.6	13.8	10.8	12.3
26	15.3	14.3	14.7	---	---	---	12.3	10.9	11.6	14.3	12.1	13.2
27	17.3	14.7	15.8	---	---	---	14.1	11.3	12.7	14.2	12.7	13.7
28	17.1	16.2	16.6	---	---	---	14.5	11.9	13.6	13.6	10.7	12.2
29	17.3	16.3	16.9	---	---	---	11.6	9.6	10.5	14.4	11.7	13.1
30	16.9	15.2	16.0	---	---	---	11.6	10.6	11.1	15.2	13.6	14.3
31	16.4	15.2	15.6	---	---	---	12.0	10.3	11.1	14.4	11.5	13.0
MONTH	21.4	13.1	16.4	---	---	---	---	---	---	16.0	9.8	12.4

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	16.5	12.9	14.5	11.4	11.0	11.1	18.5	14.6	16.5	20.4	19.0	19.5
2	17.2	15.3	16.2	12.5	10.9	11.7	19.3	15.1	17.1	19.4	17.1	18.4
3	16.9	14.8	16.2	13.7	12.1	12.8	19.4	17.7	18.3	18.1	16.5	17.5
4	14.5	12.1	12.8	13.8	12.8	13.2	19.5	17.9	18.7	17.8	16.5	17.1
5	12.0	10.9	11.5	15.8	12.9	14.3	19.7	17.4	18.4	18.8	16.6	17.5
6	11.3	10.5	11.0	14.6	10.7	12.3	17.9	16.0	17.1	18.8	16.9	17.8
7	10.1	8.1	8.9	10.7	10.4	10.6	18.4	15.7	16.9	18.1	15.3	16.8
8	11.0	8.1	9.4	12.6	10.4	11.4	16.7	15.5	16.1	19.1	15.0	17.0
9	10.2	8.2	9.2	14.3	10.4	12.4	15.6	14.1	14.5	19.2	17.6	18.5
10	10.5	6.8	8.7	15.5	11.6	13.3	14.2	13.2	13.8	19.0	17.9	18.4
11	11.8	8.1	9.8	16.6	12.4	14.3	15.7	11.5	13.5	18.2	15.4	17.0
12	13.5	9.7	11.3	17.1	13.3	15.0	16.2	12.2	14.1	18.2	15.0	16.7
13	14.5	12.1	13.1	17.1	14.2	15.6	17.5	13.2	15.1	18.0	16.2	17.1
14	17.2	14.3	15.4	18.6	15.3	16.9	17.0	14.1	15.3	18.0	16.6	17.3
15	18.4	15.9	17.0	18.5	16.5	17.5	16.3	15.5	15.8	19.5	16.9	18.1
16	17.0	15.2	16.2	17.8	15.2	16.6	18.5	14.4	16.2	19.6	17.1	18.5
17	15.6	12.6	14.1	18.4	14.5	16.5	19.2	15.0	17.0	20.4	17.7	19.0
18	12.5	10.9	11.5	18.9	15.9	17.3	19.9	15.9	17.8	19.9	18.5	19.0
19	12.0	10.2	11.1	17.3	14.6	16.2	19.0	16.6	17.7	20.9	18.7	19.5
20	13.5	11.4	12.2	18.7	15.1	16.8	19.1	16.0	16.2	20.9	19.6	20.1
21	14.1	12.7	13.4	17.2	13.5	15.6	19.9	17.1	18.4	21.7	18.9	20.2
22	12.8	10.4	11.5	13.4	12.6	13.0	20.0	16.1	18.1	21.3	19.5	20.4
23	10.2	7.6	8.7	13.0	11.3	12.0	20.5	17.0	18.7	21.9	20.1	21.0
24	10.3	6.1	8.3	14.3	12.0	13.0	21.3	17.4	19.2	22.0	19.8	20.9
25	11.7	7.5	9.6	15.8	13.2	14.2	20.8	17.7	19.3	22.8	21.2	22.0
26	12.6	10.5	11.6	18.1	14.0	15.8	20.8	17.8	19.4	23.1	21.8	22.5
27	13.2	11.5	12.8	19.1	15.4	17.2	21.5	18.1	19.7	22.8	21.5	22.1
28	11.9	9.0	10.5	19.8	17.1	18.3	21.3	18.5	20.0	22.1	20.0	21.1
29	---	---	---	21.0	17.9	19.2	21.0	19.0	20.0	21.6	19.7	20.7
30	---	---	---	19.3	17.4	18.2	22.2	18.8	20.0	22.8	20.4	21.6
31	---	---	---	18.2	16.2	17.4	---	---	---	22.9	21.1	22.0
MONTH	18.4	6.1	12.0	21.0	10.4	14.8	22.2	11.5	17.3	23.1	15.0	19.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.4	21.5	22.4	22.8	20.3	21.3	---	---	---	23.5	22.7	23.0
2	22.7	21.5	22.2	22.4	21.5	21.8	---	---	---	23.5	22.0	22.7
3	22.5	21.3	21.8	22.0	21.0	21.3	---	---	---	24.1	21.5	22.8
4	22.3	21.1	21.4	22.7	20.5	21.2	24.9	22.2	23.1	23.6	22.4	23.0
5	22.0	20.7	21.2	21.6	20.7	21.0	24.5	22.1	23.4	23.2	21.3	22.3
6	22.2	20.0	21.1	23.2	20.3	21.6	24.6	22.3	23.5	22.3	21.7	21.9
7	22.2	19.8	21.1	22.8	21.1	21.9	23.7	21.7	22.9	22.5	21.3	21.9
8	21.8	20.2	20.8	22.2	20.5	21.3	22.6	20.3	21.5	22.3	21.1	21.7
9	21.7	20.3	20.8	23.0	20.3	21.4	21.6	20.0	20.7	23.3	21.3	22.1
10	21.8	19.7	20.9	22.6	20.6	21.5	22.1	20.5	21.2	24.2	22.3	22.9
11	21.5	20.3	20.9	22.3	20.1	21.0	22.0	20.1	21.1	23.0	21.9	22.5
12	23.1	20.0	21.2	22.7	20.2	21.3	22.5	20.3	21.3	23.3	21.4	22.2
13	23.1	21.5	22.4	22.4	20.7	21.4	22.1	20.0	21.1	23.6	21.8	22.7
14	22.9	21.7	22.3	21.9	20.7	21.2	21.8	20.7	21.3	23.1	21.7	22.5
15	21.7	21.1	21.4	22.6	20.7	21.5	23.6	21.0	21.7	22.7	21.1	21.9
16	21.8	20.3	20.9	21.7	20.9	21.3	23.5	21.6	22.0	21.0	19.9	20.5
17	22.7	19.2	20.7	23.1	20.3	21.4	22.1	21.3	21.7	20.5	19.2	20.0
18	22.3	19.6	21.0	21.6	20.6	21.1	23.2	21.1	21.8	20.6	19.4	20.0
19	22.3	20.3	21.1	---	---	---	23.2	21.0	22.1	20.4	18.7	19.7
20	22.5	20.2	21.2	---	---	---	22.6	21.5	22.2	20.7	18.9	19.8
21	21.8	20.4	21.1	---	---	---	23.3	21.9	22.5	22.0	19.3	20.1
22	21.5	20.2	20.8	---	---	---	23.6	22.5	22.9	21.7	21.0	21.4
23	21.6	19.5	20.4	---	---	---	24.2	22.6	23.5	21.1	18.9	20.0
24	21.8	19.6	20.7	---	---	---	24.3	22.8	23.6	18.7	16.8	17.4
25	22.7	20.0	21.2	---	---	---	24.0	22.9	23.5	17.6	16.4	17.0
26	22.8	20.3	21.5	---	---	---	23.8	22.9	23.3	19.2	17.3	18.0
27	22.8	20.3	21.5	---	---	---	24.3	22.1	23.3	19.3	18.2	18.7
28	22.3	20.2	21.4	---	---	---	23.9	22.8	23.5	19.3	17.5	18.1
29	22.3	20.6	21.3	---	---	---	24.0	23.2	23.7	18.2	17.1	17.6
30	21.8	20.1	21.1	---	---	---	24.2	23.0	23.4	19.5	18.0	18.7
31	---	---	---	---	---	---	24.3	22.3	23.4	---	---	---
MONTH	23.4	19.2	21.3	---	---	---	---	---	---	24.2	16.4	20.8

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.1	3.9	5.0	6.5	4.1	5.3	---	---	---	9.0	8.4	8.7
2	5.9	5.3	5.5	7.1	4.1	5.5	---	---	---	9.4	7.9	8.7
3	5.8	5.3	5.6	5.5	3.9	4.6	---	---	---	8.3	7.9	8.1
4	7.1	5.2	6.2	6.6	3.5	5.4	---	---	---	9.8	8.1	8.8
5	7.0	6.1	6.6	6.5	5.4	5.9	---	---	---	10.0	8.4	9.0
6	6.8	6.1	6.6	7.3	5.6	6.4	---	---	---	8.9	7.6	8.4
7	6.8	6.1	6.5	7.2	5.7	6.6	---	---	---	8.7	6.9	7.7
8	7.2	6.0	6.4	6.6	5.1	6.0	---	---	---	8.2	6.9	7.5
9	7.3	5.9	6.4	6.5	4.7	5.8	9.5	7.8	8.6	9.0	7.5	8.4
10	7.2	5.8	6.3	6.2	4.6	5.4	10.1	7.1	8.2	9.2	8.4	8.9
11	7.2	5.6	6.2	7.3	4.7	5.9	9.6	6.8	8.0	8.7	8.2	8.4
12	7.3	5.7	6.3	7.6	5.1	6.4	10.1	7.1	8.4	8.5	8.0	8.2
13	7.2	6.1	6.5	7.1	5.8	6.6	10.5	7.3	8.5	8.9	8.3	8.7
14	7.2	6.1	6.7	7.7	5.8	6.7	10.6	7.0	8.4	8.8	8.1	8.5
15	7.3	6.0	6.6	7.2	5.5	6.1	9.4	6.4	7.6	8.7	8.2	8.4
16	7.2	6.0	6.5	7.1	5.5	6.3	10.1	6.5	8.1	9.2	8.2	8.6
17	7.2	5.7	6.5	7.7	5.6	6.5	10.8	7.3	8.7	9.3	8.3	8.7
18	7.0	5.5	6.1	8.9	6.7	7.2	11.2	7.1	8.8	9.1	8.1	8.6
19	6.8	4.9	5.7	---	---	---	11.2	7.2	8.7	9.1	7.9	8.3
20	7.8	5.2	6.2	---	---	---	12.5	5.9	8.3	8.9	7.6	8.2
21	7.3	5.7	6.5	---	---	---	10.9	4.8	7.3	9.3	7.8	8.4
22	7.7	5.6	6.4	---	---	---	11.7	5.7	8.0	9.2	7.9	8.5
23	8.0	5.5	6.4	---	---	---	8.2	6.1	7.3	10.0	7.9	8.7
24	7.2	5.2	6.0	---	---	---	8.4	6.8	7.5	9.6	7.8	8.6
25	7.8	5.0	6.1	---	---	---	10.0	7.1	8.3	9.6	7.7	8.5
26	6.8	5.3	6.1	---	---	---	10.7	7.5	9.0	9.6	7.3	8.2
27	7.4	5.0	6.1	---	---	---	10.7	7.1	8.5	9.7	6.9	8.1
28	5.9	4.6	5.1	---	---	---	9.4	6.7	7.8	10.4	7.5	8.5
29	5.7	5.2	5.5	---	---	---	10.9	8.0	9.0	10.4	7.1	8.5
30	6.1	4.3	5.3	---	---	---	9.2	7.4	8.2	9.1	6.9	7.8
31	6.2	4.9	5.6	---	---	---	9.6	8.0	8.7	10.2	7.2	8.2
MONTH	8.0	3.9	6.1	---	---	---	---	---	---	10.4	6.9	8.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.1	6.9	8.1	10.1	9.2	9.8	10.0	8.6	9.2	5.3	4.1	4.8
2	9.6	6.0	7.2	10.2	8.9	9.5	10.0	8.5	9.1	6.3	4.4	5.2
3	8.4	5.5	6.9	9.9	8.7	9.2	9.1	8.4	8.7	7.2	4.6	5.8
4	9.9	6.2	7.6	9.8	8.1	9.0	9.5	8.3	8.8	6.8	5.6	6.0
5	9.0	6.8	7.9	9.4	8.8	9.0	9.6	9.2	9.4	7.1	5.1	6.2
6	9.0	7.8	8.4	9.8	8.9	9.5	10.0	9.0	9.5	7.1	6.0	6.5
7	10.0	8.8	9.4	10.2	9.8	10.1	9.8	8.6	9.2	7.7	5.9	6.6
8	10.5	8.7	9.2	10.3	9.1	9.8	9.2	8.5	8.9	7.4	5.4	6.4
9	10.3	8.5	9.1	10.5	9.1	9.6	9.4	9.0	9.2	6.4	5.0	5.6
10	10.5	8.6	9.3	10.0	8.7	9.3	9.4	8.7	9.1	6.6	5.6	6.1
11	10.2	7.9	8.9	9.7	8.1	9.0	9.6	7.6	8.6	7.1	5.4	6.2
12	10.2	7.6	8.7	9.4	8.1	8.6	8.6	7.1	7.8	7.0	5.3	6.0
13	9.8	7.1	8.1	9.6	7.7	8.5	8.3	7.0	7.5	6.4	5.5	5.9
14	9.9	6.2	7.6	9.4	7.4	8.2	8.1	6.4	7.1	6.6	5.4	6.0
15	9.8	6.0	7.4	9.4	7.3	8.2	7.3	6.3	6.9	6.4	4.9	5.7
16	9.4	5.5	7.2	10.1	7.6	8.6	8.5	6.3	7.1	6.9	4.9	5.9
17	8.2	6.1	7.1	10.2	7.6	8.6	8.1	6.2	6.9	7.2	4.9	6.1
18	8.6	6.6	7.6	10.1	7.1	8.2	8.0	5.7	6.6	4.8	2.7	3.9
19	10.1	7.3	8.5	10.5	7.1	8.4	7.4	5.7	6.4	5.7	3.8	4.9
20	8.7	7.0	7.9	10.3	7.1	8.3	6.1	5.5	5.8	5.5	3.9	4.6
21	8.3	6.9	7.9	8.7	7.4	8.3	7.8	5.3	6.3	5.7	4.0	4.8
22	8.9	7.5	8.2	9.2	8.6	8.8	7.9	5.2	6.3	5.2	3.8	4.4
23	10.5	8.2	9.3	9.5	8.7	9.2	7.7	5.1	6.1	5.4	3.6	4.3
24	11.9	8.9	10.2	9.5	8.7	9.2	7.3	4.8	5.8	5.0	3.6	4.4
25	11.9	8.7	10.3	9.4	8.3	8.8	6.8	4.4	5.6	5.1	3.3	4.2
26	10.2	8.5	9.2	9.7	8.0	8.8	6.5	4.2	5.5	4.7	3.2	3.9
27	9.5	7.7	8.5	9.5	7.7	8.6	6.3	4.1	5.4	5.0	3.5	4.1
28	10.8	9.6	10.2	9.4	7.3	8.2	6.3	3.7	4.8	5.5	3.5	4.3
29	---	---	---	9.3	7.4	8.2	5.7	3.7	4.7	5.2	3.6	4.5
30	---	---	---	8.8	8.4	8.7	5.9	4.1	5.0	5.1	3.5	4.3
31	---	---	---	9.2	8.4	8.8	---	---	---	4.8	3.4	4.1
MONTH	11.9	5.5	8.4	10.5	7.1	8.9	10.0	3.7	7.2	7.7	2.7	5.2

02423398 LITTLE CAHABA RIVER NEAR LEEDS, AL--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	4.6	3.2	3.9	7.4	6.5	6.8	---	---	---	4.4	3.6	3.9
2	4.3	2.9	3.5	7.3	6.9	7.2	---	---	---	4.3	3.6	3.9
3	4.4	2.8	3.5	7.3	7.0	7.2	---	---	---	4.7	3.5	4.0
4	4.2	3.0	3.5	7.4	7.0	7.2	9.1	8.1	8.6	4.7	3.7	4.1
5	3.8	3.3	3.6	7.4	7.2	7.3	9.1	7.4	8.1	4.7	3.6	4.0
6	4.3	3.3	3.7	7.3	7.0	7.2	9.0	7.2	8.0	4.6	3.6	4.1
7	4.4	3.1	3.6	7.2	6.9	7.1	9.1	7.2	7.9	4.6	3.6	4.1
8	4.0	3.1	3.5	7.1	6.9	7.0	9.3	7.5	8.1	4.8	3.8	4.2
9	4.0	3.2	3.6	7.3	6.8	7.1	9.2	7.7	8.3	5.2	3.9	4.5
10	4.3	3.0	3.6	7.1	6.8	7.0	9.1	7.1	7.9	5.4	4.4	4.7
11	4.0	3.1	3.5	7.0	6.6	6.9	9.2	7.2	8.0	5.2	4.4	4.8
12	3.8	2.9	3.3	6.9	6.6	6.8	9.0	6.6	7.6	5.8	4.8	5.3
13	4.1	2.6	3.2	7.2	6.5	6.8	9.1	6.7	7.7	6.0	5.4	5.6
14	3.9	2.8	3.3	7.4	7.0	7.2	8.5	6.7	7.5	6.6	5.4	5.9
15	4.1	3.7	3.9	7.5	7.1	7.3	8.2	6.3	7.3	6.7	5.7	6.2
16	4.5	4.0	4.3	7.4	7.2	7.2	7.1	6.0	6.5	7.3	6.3	6.7
17	5.2	4.4	4.8	7.5	7.2	7.3	7.8	6.1	6.9	7.7	6.6	7.1
18	5.5	4.5	4.9	7.4	7.2	7.3	6.6	5.5	6.0	8.0	7.0	7.5
19	5.9	4.8	5.3	---	---	---	6.3	4.9	5.6	8.5	6.0	7.3
20	6.6	5.5	5.9	---	---	---	6.0	4.7	5.2	7.6	5.9	6.5
21	6.7	6.4	6.6	---	---	---	5.5	4.0	4.8	6.8	5.6	6.2
22	6.9	6.5	6.7	---	---	---	5.3	4.0	4.6	6.5	6.0	6.3
23	7.0	6.6	6.8	---	---	---	5.1	3.9	4.4	6.5	5.7	6.2
24	6.8	6.5	6.7	---	---	---	4.9	3.8	4.2	6.9	6.1	6.4
25	6.9	6.5	6.7	---	---	---	4.6	3.6	4.0	7.6	6.4	6.9
26	7.1	6.4	6.7	---	---	---	4.3	3.5	3.9	6.9	6.3	6.6
27	7.0	6.5	6.7	---	---	---	4.7	3.6	4.2	6.7	6.2	6.5
28	7.1	6.4	6.7	---	---	---	4.5	3.5	3.9	6.5	6.2	6.3
29	7.1	6.5	6.8	---	---	---	4.6	3.7	4.1	6.4	6.0	6.2
30	6.9	6.5	6.7	---	---	---	4.4	3.3	3.9	6.7	5.9	6.2
31	---	---	---	---	---	---	4.6	3.3	3.9	---	---	---
MONTH	7.1	2.6	4.8	---	---	---	---	---	---	8.5	3.5	5.6

02423400 LITTLE CAHABA RIVER NEAR JEFFERSON PARK, AL

LOCATION.--Lat 33°29'59", long 86°36'51", in NW¼ sec. 2, T. 18 S., R. 1 W., Jefferson County, Hydrologic Unit 03150202, on left upstream side of bridge on county road, 0.5 mi northwest of Highway 119, 0.7 mi upstream of Lake Purdy, 3.3 mi southwest of Jefferson Park, and 5.1 mi southeast of Leeds.

DRAINAGE AREA.--24.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 556.43 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharge. Water-discharge records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,400 ft³/s, July 2, 1989, gage height, 5.14 ft; minimum discharge, 2.7 ft³/s, Aug. 3, 6, 1986.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 5	0115	1,240	4.85	July 2	0300	*1,400	*5.14
June 21	0915	812	4.02	July 4	2400	981	4.19

Minimum discharge, 7.1 ft³/s, Oct. 18, 30, Nov. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	9.9	36	102	24	111	80	34	12	182	24	11
2	116	10	37	63	22	79	67	29	11	1030	24	17
3	49	9.0	32	72	23	67	61	23	12	271	23	15
4	36	14	29	64	21	294	149	23	16	303	22	13
5	30	47	26	52	25	835	242	41	24	358	20	11
6	26	20	26	49	33	364	106	40	26	196	17	10
7	24	15	24	42	79	158	88	27	18	133	17	11
8	21	14	23	40	53	113	97	23	17	85	17	9.6
9	19	13	21	44	43	87	138	23	22	94	16	9.1
10	17	12	19	76	38	76	95	32	18	116	15	43
11	15	12	18	76	36	66	74	25	16	68	14	30
12	14	12	18	92	33	57	65	20	14	56	14	17
13	12	28	18	232	31	51	56	20	16	51	14	26
14	13	17	16	139	28	47	49	22	17	46	14	16
15	12	14	15	137	28	45	58	27	64	43	14	15
16	10	18	15	99	25	41	49	22	48	43	16	14
17	11	14	15	80	25	37	41	19	35	41	14	12
18	9.6	13	15	67	24	36	39	17	25	37	13	13
19	11	15	14	58	26	33	36	17	26	37	17	11
20	10	297	14	51	28	32	38	18	50	50	12	12
21	16	82	12	45	88	177	36	19	640	35	12	20
22	13	55	13	39	54	106	33	18	267	43	12	136
23	11	44	37	36	43	132	30	18	126	57	12	44
24	11	37	29	34	36	112	29	17	80	51	11	25
25	11	31	20	31	36	82	28	16	62	44	11	74
26	9.7	30	20	30	32	70	26	14	49	40	11	72
27	11	103	17	26	33	60	26	14	42	37	14	36
28	9.0	74	20	27	291	53	25	13	37	33	11	30
29	10	53	20	25	---	65	22	13	34	33	12	29
30	9.1	47	18	30	---	315	25	14	36	28	12	64
31	11	---	98	27	---	109	---	12	---	28	14	---
TOTAL	672.4	1159.9	735	1985	1258	3910	1908	670	1860	3669	469	845.7
MEAN	21.7	38.7	23.7	64.0	44.9	126	63.6	21.6	62.0	118	15.1	28.2
MAX	116	297	98	232	291	835	242	41	640	1030	24	136
MIN	9.0	9.0	12	25	21	32	22	12	11	28	11	9.1
CFSM	.82	1.46	.89	2.42	1.70	4.76	2.40	.82	2.34	4.47	.57	1.06
IN.	.94	1.63	1.03	2.79	1.77	5.49	2.68	.94	2.61	5.15	.66	1.19

CAL YR 1988 TOTAL 8710.0 MEAN 23.8 MAX 297 MIN 3.4 CFSM .90 IN. 12.23
WTR YR 1989 TOTAL 19142.0 MEAN 52.4 MAX 1030 MIN 9.0 CFSM 1.98 IN. 26.87

02423400 LITTLE CAHABA RIVER NEAR JEFFERSON PARK, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1986 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1986 to current year.
WATER TEMPERATURE: October 1986 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1986.

REMARKS.--Miscellaneous samples of chemical data published for water year 1986. No specific conductance or water temperature data for several days due to equipment malfunctions.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 664 microsiemens, May 27-28, 1987; minimum, 94 microsiemens, July 2, 1989.
WATER TEMPERATURE: Maximum, 26.4°C, June 27, 1988; minimum, 2.4°C, Feb. 7, 1988.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 643 microsiemens, June 20; minimum, 94 microsiemens, July 2.
WATER TEMPERATURE: Maximum, 26.3°C, Aug. 24; minimum, 6.0°C, Feb. 24.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
OCT												
20...	1030	8.5	455	466	7.80	14.0	748	8.2	81	--	--	200
NOV												
18...	0845	15	441	--	7.30	11.0	752	8.0	74	230	220	--
DEC												
21...	1015	11	420	--	7.60	11.5	751	10.6	99	120	76	--
JAN												
20...	1000	47	380	389	7.40	12.0	750	9.2	87	210	150	180
FEB												
23...	1040	145	350	--	7.40	8.0	752	10.7	92	330	160	--
MAR												
23...	1145	156	250	--	7.80	12.0	744	9.4	89	3000	2000	--
APR												
21...	0900	33	370	371	7.80	17.0	745	8.1	86	100	100	180
MAY												
17...	1000	22	405	--	7.80	17.5	746	7.6	81	350	160	--
JUN												
21...	1320	788	118	--	7.30	20.5	744	7.1	81	--	--	--
JUL												
18...	0900	36	372	378	7.80	21.0	745	10.0	115	840	260	180
AUG												
23...	0825	13	375	--	7.90	23.5	745	7.0	84	120	340	--
SEP												
19...	0945	14	400	--	7.90	18.5	745	8.4	92	140	160	--

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT												
20...	14	69	7.7	10	9	0.3	15	8.10	190	36	10	0.20
NOV												
18...	--	--	--	--	--	--	--	--	190	--	--	--
DEC												
21...	--	--	--	--	--	--	--	--	190	--	--	--
JAN												
20...	10	63	5.5	4.7	5	.2	6.3	7.89	170	24	5.4	.20
FEB												
23...	--	--	--	--	--	--	--	--	150	--	--	--
MAR												
23...	--	--	--	--	--	--	--	--	110	--	--	--
APR												
21...	12	63	5.8	5.2	6	.2	7.1	7.84	170	22	5.3	.20
MAY												
17...	--	--	--	--	--	--	--	--	170	--	--	--
JUN												
21...	--	--	--	--	--	--	--	--	43	--	--	--
JUL												
18...	8	61	5.8	4.6	5	.2	6.7	7.76	169	24	4.3	.20
AUG												
23...	--	--	--	--	--	--	--	--	161	--	--	--
SEP												
19...	--	--	--	--	--	--	--	--	172	--	--	--

02423400 LITTLE CAHABA RIVER NEAR JEFFERSON PARK, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
OCT 20...	9.8	287	272	0.39	6.58	1.04	0.060	1.10	0.010	0.20	0.21	1.3
JAN 20...	8.6	233	220	.32	29.8	.660	.030	.690	.100	.30	.40	1.1
APR 21...	7.3	206	218	.28	18.6	.690	.040	.730	.050	.31	.36	1.1
JUL 18...	9.0	221	217	.30	21.8	.770	.020	.790	.030	.20	.23	1.0

DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT 20...	0.060	0.050	0.01	--	--	40	--	--	--	--	100
JAN 20...	.050	.030	.02	--	--	20	--	--	--	--	200
APR 21...	.040	.020	.02	<1	<1	<20	<1	<1	<1	<1	220
JUL 18...	.050	.030	.02	--	--	<20	--	--	--	--	330

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT 20...	30	--	--	<10	<10	--	--	--	--	--	--
JAN 20...	10	--	--	30	20	--	--	--	--	--	--
APR 21...	10	30	<5	40	20	<.10	0.1	<1	<1	<1	<1.0
JUL 18...	30	--	--	50	20	--	--	--	--	--	--

02423400 LITTLE CAHABA RIVER NEAR JEFFERSON PARK, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	388	228	350	463	426	443	194	181	188	274	193	240
2	303	221	258	463	433	446	210	185	195	325	278	298
3	341	304	321	452	439	446	205	189	198	335	278	315
4	364	340	351	465	429	443	438	194	208	328	280	304
5	385	365	376	434	295	347	204	190	197	354	325	334
6	399	385	391	370	307	327	447	186	215	367	348	358
7	411	399	404	436	375	419	200	196	197	379	350	361
8	416	410	412	450	413	430	198	188	194	390	362	375
9	423	416	418	457	421	439	202	191	197	376	360	369
10	429	420	424	453	432	444	204	187	196	352	278	309
11	433	423	427	456	437	446	200	183	192	317	289	310
12	432	425	428	453	438	446	199	184	193	311	261	301
13	432	425	428	445	396	422	198	179	188	252	211	225
14	433	431	432	402	394	398	---	---	---	285	243	265
15	441	432	435	431	390	410	---	---	---	291	266	275
16	443	436	439	458	416	426	---	---	---	328	288	299
17	447	443	444	472	449	462	---	---	---	331	310	323
18	451	445	447	453	437	443	---	---	---	347	328	335
19	455	451	453	466	438	450	---	---	---	366	335	348
20	455	419	444	452	122	218	---	---	---	379	354	366
21	450	419	431	247	198	218	---	---	---	384	368	376
22	452	420	436	232	203	218	457	408	428	401	379	387
23	436	403	416	229	209	220	437	292	399	404	380	390
24	454	410	433	231	210	221	354	293	331	403	391	397
25	460	414	439	220	204	212	404	343	376	404	390	395
26	456	420	436	217	187	212	408	386	396	419	391	402
27	468	421	450	206	133	160	436	414	422	418	393	401
28	454	428	439	173	155	162	426	400	414	410	388	398
29	476	429	455	193	174	179	436	383	403	418	395	405
30	461	434	441	197	185	192	418	388	403	419	383	399
31	469	435	452	---	---	---	412	187	317	391	374	383
MONTH	476	221	416	472	122	343	---	---	---	419	193	343

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	407	377	393	275	222	253	329	302	316	422	363	391
2	411	396	404	301	272	290	346	330	338	398	351	367
3	425	396	406	327	297	314	357	346	353	430	363	406
4	419	401	408	337	117	272	350	218	298	462	432	446
5	415	386	401	172	113	147	244	206	225	485	275	419
6	405	340	365	231	155	197	274	245	261	268	260	264
7	353	238	284	274	232	256	293	275	284	265	247	254
8	312	270	298	307	275	288	304	248	295	266	253	258
9	356	312	341	329	309	317	248	228	237	285	267	274
10	360	338	351	333	312	325	283	249	270	297	282	289
11	372	350	365	342	333	338	306	283	295	300	270	285
12	375	364	370	350	337	343	322	305	314	305	290	298
13	386	364	378	354	342	349	332	320	327	316	300	307
14	393	374	383	369	353	359	341	326	335	361	311	332
15	401	382	390	375	358	365	352	330	341	402	363	379
16	398	388	392	376	361	370	347	329	341	409	396	403
17	405	390	397	381	364	372	363	350	355	412	383	401
18	408	390	398	381	367	375	369	353	362	411	375	393
19	401	377	390	382	367	373	376	364	369	402	379	390
20	389	369	379	381	369	374	373	362	368	417	373	398
21	390	220	281	370	194	254	381	361	369	410	368	391
22	342	274	294	263	229	246	395	377	388	408	366	389
23	348	314	330	279	239	259	398	378	390	415	377	399
24	358	341	349	280	243	265	401	376	393	422	380	404
25	380	350	366	303	278	292	418	388	405	422	394	404
26	378	359	368	322	302	311	425	382	396	414	387	400
27	381	307	370	337	323	329	428	384	402	417	386	399
28	307	143	200	354	337	346	429	396	413	411	391	399
29	---	---	---	364	298	355	420	392	405	424	380	396
30	---	---	---	275	218	241	435	386	403	413	384	401
31	---	---	---	301	261	282	---	---	---	440	401	419
MONTH	425	143	359	382	113	305	435	206	342	485	247	366

02423400 LITTLE CAHABA RIVER NEAR JEFFERSON PARK, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	442	423	433	331	112	282	418	402	409	457	404	427
2	425	408	417	144	94	113	424	416	419	423	382	398
3	408	391	397	203	146	176	433	410	426	413	353	381
4	433	395	403	214	132	194	417	367	391	395	361	378
5	433	401	416	196	134	173	417	380	399	411	369	382
6	415	391	403	209	184	198	419	396	408	416	369	384
7	402	386	393	230	193	210	417	389	401	425	377	394
8	397	374	388	253	231	242	415	383	399	434	382	407
9	416	390	404	311	250	267	418	391	404	426	389	404
10	408	372	388	300	232	266	414	392	402	388	195	336
11	425	391	407	326	302	315	417	384	401	339	202	273
12	449	418	434	334	325	330	416	391	401	411	344	365
13	452	426	439	334	278	289	429	386	404	400	317	358
14	463	443	452	280	276	278	424	382	401	402	315	345
15	450	288	331	278	274	275	417	386	403	401	381	392
16	376	329	350	277	271	275	423	382	402	407	375	388
17	434	379	403	272	269	270	416	380	394	413	388	397
18	586	437	501	392	268	334	421	381	405	414	383	400
19	626	540	580	395	380	392	412	380	391	429	384	406
20	643	593	618	375	324	350	417	381	399	413	375	392
21	589	110	220	377	333	364	409	378	391	414	265	380
22	187	130	159	390	378	382	438	379	407	293	198	243
23	243	181	216	398	234	292	453	413	430	367	296	334
24	275	245	256	361	319	336	436	409	422	386	354	371
25	298	277	289	369	332	354	427	410	417	395	282	365
26	316	299	306	385	370	376	441	397	410	350	280	315
27	331	314	322	382	370	376	456	396	422	393	352	372
28	336	330	332	394	383	388	441	372	399	414	389	397
29	346	335	339	397	389	393	400	371	382	417	402	410
30	343	316	335	401	394	396	440	355	401	420	361	392
31	---	---	---	419	396	411	414	357	376	---	---	---
MONTH	643	110	378	419	94	300	456	355	404	457	195	373

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	11.6	10.2	10.8	12.8	12.0	12.4
2	19.8	19.3	19.5	---	---	---	10.9	9.4	10.0	12.6	11.3	12.0
3	19.4	18.7	19.1	---	---	---	10.9	8.7	9.9	14.1	12.7	13.4
4	18.7	16.1	17.5	---	---	---	11.6	9.5	10.4	13.1	10.6	11.7
5	14.7	14.4	14.9	---	---	---	11.1	8.9	10.0	10.9	10.0	10.6
6	15.5	13.1	14.5	---	---	---	11.0	8.7	9.8	14.6	11.1	13.2
7	15.4	14.1	14.7	---	---	---	12.1	10.0	10.9	16.1	14.3	15.0
8	14.7	13.5	14.0	---	---	---	12.6	10.4	11.5	16.2	13.9	15.5
9	14.4	13.2	13.8	---	---	---	12.2	9.9	11.5	13.8	11.2	12.1
10	15.2	13.4	14.2	---	---	---	10.5	9.1	9.8	11.8	10.5	11.0
11	15.1	13.4	14.1	---	---	---	9.9	8.9	9.6	12.7	11.9	12.2
12	14.6	12.5	13.6	---	---	---	9.1	7.5	8.6	14.1	12.8	13.5
13	13.4	12.0	12.7	---	---	---	8.9	6.9	7.8	14.0	12.4	13.1
14	13.0	10.9	12.0	---	---	---	---	---	---	13.2	12.1	12.5
15	13.4	10.7	12.0	---	---	---	---	---	---	13.3	12.4	12.9
16	14.3	11.7	12.9	---	---	---	---	---	---	12.6	11.6	12.1
17	15.4	12.6	13.6	---	---	---	---	---	---	11.8	10.2	11.1
18	---	---	---	13.3	11.4	12.5	---	---	---	11.7	9.9	11.0
19	---	---	---	15.3	12.6	13.7	---	---	---	12.3	10.9	11.6
20	14.4	12.8	13.7	17.8	15.5	16.8	---	---	---	13.4	11.8	12.8
21	14.6	14.0	14.3	16.0	13.9	14.9	---	---	---	11.6	10.4	11.0
22	14.6	13.2	13.9	14.1	12.7	13.5	15.6	13.0	14.3	11.4	9.7	10.5
23	---	---	---	15.0	13.9	14.3	16.0	15.1	15.5	11.6	9.4	10.6
24	---	---	---	14.4	12.8	13.5	16.3	14.6	15.7	12.6	10.7	11.6
25	---	---	---	14.9	12.7	13.8	14.4	11.3	13.2	13.2	10.7	11.9
26	---	---	---	16.6	14.5	15.5	11.8	9.8	10.9	13.6	11.9	12.9
27	---	---	---	16.7	14.9	16.1	13.3	10.7	12.0	14.8	12.3	13.7
28	---	---	---	14.7	11.9	13.3	13.8	11.5	13.1	13.3	10.7	12.0
29	---	---	---	11.8	10.7	11.4	11.3	9.4	10.3	14.1	11.2	12.6
30	---	---	---	12.6	11.4	11.9	10.3	9.3	9.8	15.4	13.5	14.3
31	---	---	---	---	---	---	11.8	10.4	11.1	14.6	12.0	13.2
MONTH	---	---	---	---	---	---	---	---	---	16.2	9.4	12.4

02423400 LITTLE CAHABA RIVER NEAR JEFFERSON PARK, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	16.0	12.6	14.3	11.4	11.0	11.2	15.8	13.5	14.8	20.9	19.6	20.5
2	18.0	15.6	16.7	12.3	11.1	11.6	16.5	13.9	15.4	19.8	18.2	19.0
3	17.9	14.8	16.8	13.5	12.2	12.9	17.3	16.3	16.8	18.3	17.2	17.8
4	14.7	11.6	13.1	14.0	13.4	13.7	17.9	16.2	17.2	17.6	17.0	17.3
5	11.5	10.7	11.0	16.1	13.5	14.8	17.0	15.5	16.2	18.5	16.9	17.5
6	11.1	10.0	10.6	15.3	11.1	12.9	16.1	14.2	14.9	18.8	17.8	18.3
7	9.9	8.2	8.9	11.0	10.3	10.5	15.7	14.0	14.9	17.9	16.0	17.0
8	9.6	8.0	8.8	12.2	10.2	11.2	15.6	14.5	14.9	17.8	15.2	16.6
9	9.2	7.6	8.5	13.5	10.9	12.3	14.9	13.6	14.0	19.3	17.6	18.5
10	8.7	6.7	7.7	14.7	11.9	13.4	13.6	13.0	13.4	19.2	17.8	18.7
11	10.1	7.6	8.8	15.8	13.0	14.6	14.2	11.8	13.1	18.1	16.2	17.2
12	12.1	9.2	10.7	16.6	14.0	15.5	14.8	12.6	13.8	17.6	15.1	16.4
13	14.2	11.8	12.9	17.2	15.2	16.2	16.3	13.7	15.1	17.4	16.2	16.8
14	17.4	14.3	15.8	19.1	16.3	17.6	16.3	14.7	15.7	17.6	16.7	17.2
15	19.5	16.6	17.8	19.4	17.9	18.5	16.5	16.0	16.2	19.3	17.1	18.1
16	18.0	16.1	17.1	18.6	16.5	17.5	17.6	14.9	16.3	19.6	17.5	18.6
17	15.9	12.6	14.5	18.8	15.4	17.1	18.3	15.8	17.2	20.3	18.1	19.2
18	12.5	10.4	11.3	19.9	17.1	18.4	19.2	16.9	18.2	20.1	19.4	19.7
19	11.2	10.1	10.6	18.6	15.9	17.3	19.5	17.8	18.5	21.1	19.6	20.3
20	13.1	11.0	11.8	18.9	15.9	17.4	19.1	17.0	18.1	21.2	20.6	20.9
21	13.9	13.2	13.6	18.1	14.8	16.6	19.8	18.1	18.9	22.1	20.1	21.0
22	13.5	10.0	11.8	14.6	13.2	13.6	20.0	17.3	18.7	22.2	20.7	21.4
23	9.7	6.8	8.3	13.2	11.8	12.3	20.9	18.1	19.4	23.0	21.4	22.0
24	8.5	6.0	7.2	13.7	11.9	12.8	21.4	18.8	20.0	23.2	21.1	22.1
25	10.0	7.1	8.6	14.8	13.2	13.9	21.5	19.1	20.3	24.4	22.2	23.2
26	12.1	9.8	10.9	16.9	13.9	15.5	21.7	19.1	20.3	25.2	23.4	24.2
27	13.1	11.8	12.6	18.2	15.7	17.0	21.8	19.3	20.5	25.0	23.1	24.0
28	11.5	9.2	10.6	19.4	17.1	18.3	22.4	19.8	21.0	23.8	21.5	22.7
29	---	---	---	20.2	17.8	18.9	21.7	20.5	21.1	23.1	20.3	21.8
30	---	---	---	18.0	16.7	17.4	21.2	20.2	20.7	24.1	21.3	22.6
31	---	---	---	17.7	15.1	16.5	---	---	---	25.0	22.3	23.5
MONTH	19.5	6.0	11.8	20.2	10.2	15.1	22.4	11.8	17.2	25.2	15.1	19.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.5	22.7	24.1	24.0	22.3	22.7	24.6	23.4	24.0	25.0	23.8	24.3
2	25.1	22.9	24.0	23.7	22.7	23.1	24.5	23.3	23.8	24.2	23.4	23.8
3	24.4	22.9	23.6	22.9	22.0	22.4	24.4	23.1	23.7	24.7	22.7	23.6
4	23.4	22.6	22.9	23.4	21.5	22.2	24.7	22.8	23.8	24.4	23.3	23.8
5	22.5	22.1	22.3	23.0	21.7	22.0	24.7	22.9	23.8	24.2	22.4	23.3
6	22.7	21.4	22.1	23.8	21.4	22.4	25.0	23.2	23.9	23.8	22.6	23.0
7	23.6	21.2	22.3	23.4	22.4	22.9	24.0	22.6	23.2	23.8	22.3	22.9
8	22.4	21.8	22.0	23.2	22.1	22.5	22.4	20.7	21.6	24.1	21.9	22.9
9	22.4	21.3	21.8	23.7	21.7	22.3	21.1	19.7	20.4	24.5	21.8	23.2
10	23.1	21.1	22.0	23.9	22.5	23.0	21.7	20.2	20.8	24.1	22.9	23.4
11	22.3	21.5	21.9	22.9	21.7	22.2	21.7	19.8	20.7	23.8	23.1	23.5
12	23.7	21.5	22.5	22.9	21.8	22.3	21.9	19.8	20.7	23.7	22.5	23.0
13	24.6	22.8	23.6	22.9	22.5	22.7	21.7	19.6	20.6	24.0	22.2	23.2
14	25.1	22.9	23.9	22.6	22.4	22.5	21.6	20.3	20.9	24.2	22.9	23.5
15	23.3	22.1	22.6	22.9	22.2	22.5	21.9	20.5	21.1	23.4	22.0	23.1
16	22.3	21.6	22.0	22.8	22.2	22.5	21.9	20.9	21.4	21.8	20.9	21.3
17	22.2	20.6	21.5	22.8	21.7	22.3	22.3	21.3	21.7	21.5	19.6	20.5
18	23.6	21.0	22.3	22.4	21.4	21.9	22.7	20.7	21.7	21.1	18.8	20.0
19	22.6	21.8	22.3	23.0	21.9	22.4	22.6	21.0	21.7	20.9	18.6	19.7
20	22.9	21.7	22.3	23.5	22.4	23.0	23.2	21.3	22.2	20.9	18.4	19.6
21	22.8	21.7	22.3	23.1	22.6	22.8	23.9	21.7	22.7	20.7	18.9	19.8
22	22.6	21.4	21.9	22.7	22.2	22.5	25.3	22.3	23.5	21.9	20.9	21.6
23	22.1	20.6	21.3	23.1	22.5	22.7	25.8	23.7	24.6	21.3	18.8	20.4
24	22.3	21.3	21.7	23.6	22.6	23.1	26.3	23.8	24.9	18.6	16.8	17.4
25	22.7	21.9	22.3	24.0	23.0	23.5	26.1	23.9	25.0	16.7	16.3	16.5
26	23.1	22.5	22.8	24.5	23.5	24.0	25.8	24.4	25.0	18.3	16.7	17.5
27	23.3	22.7	22.9	25.0	23.9	24.4	25.2	23.8	24.5	19.1	18.1	18.6
28	23.4	22.7	22.9	24.8	23.8	24.3	25.8	23.7	24.7	18.9	17.4	18.0
29	23.2	22.3	22.7	25.0	23.7	24.3	25.8	23.8	24.8	17.5	17.0	17.3
30	23.2	22.3	22.6	24.6	23.7	24.1	25.4	24.1	24.6	19.2	17.6	18.4
31	---	---	---	25.1	23.4	24.2	25.1	23.7	24.3	---	---	---
MONTH	25.5	20.6	22.5	25.1	21.4	22.9	26.3	19.6	22.9	25.0	16.3	21.2

0242340550 COX CREEK NEAR CAHABA HEIGHTS, AL

LOCATION.--Lat 33°26'54", long 86°38'40", in SE¼ sec. 21, T. 18 S., R. 1 W., Shelby County, Hydrologic Unit 03150203, on left upstream side of bridge on county road, 0.4 mi upstream from Lake Purdy, 0.5 mi southeast of Highway 119, and 4.1 mi east of Cahaba Heights.

DRAINAGE AREA.--3.19 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 555.13 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharge: December 9-20. Water-discharge records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 333 ft³/s, Aug. 30, 1989, gage height, 5.14 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 20	0345	170	4.29	Mar. 29	2215	157	4.20
Mar. 4	1900	270	4.85	Aug. 30	2000	*333	*5.14

No flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	.21	3.1	27	2.9	20	11	.67	.00	7.9	.25	.45
2	3.2	.13	2.2	15	2.8	14	8.6	.56	.00	25	1.4	.44
3	1.7	.07	1.9	14	2.8	10	12	.40	.01	14	1.2	.19
4	1.1	2.9	1.7	9.4	2.5	64	39	.57	1.2	10	.56	.07
5	.71	2.2	1.4	7.6	3.9	59	38	3.5	2.6	12	.35	.02
6	.40	.83	1.3	6.5	5.8	33	19	1.4	1.9	12	.28	0
7	.28	.58	1.2	5.2	14	19	14	.67	.79	7.9	.35	0
8	.21	.51	1.1	5.1	10	12	14	.49	1.0	5.3	.20	0
9	.17	.44	e1.0	7.7	7.7	8.7	16	.47	1.5	3.8	.13	0
10	.13	.47	e.96	12	6.3	6.5	12	.52	.75	2.9	.10	0
11	.10	.43	e.91	11	5.3	5.2	8.9	.35	.64	2.3	.07	.11
12	.05	.88	e.87	20	4.4	4.3	6.9	.27	.66	2.0	.02	.03
13	.02	1.9	e.83	35	3.8	3.6	5.5	.24	.59	1.9	.01	0
14	.02	1.0	e.79	22	3.3	3.0	4.4	1.9	1.6	1.6	0	0
15	.01	.82	e.74	20	2.9	2.6	5.4	1.3	6.5	1.2	0	0
16	0	.92	e.69	14	2.5	2.1	3.6	.58	4.4	1.1	.10	0
17	0	.80	e.64	10	2.3	1.9	3.0	.38	2.3	.91	.13	0
18	0	.55	e.58	7.9	2.8	1.7	2.6	.28	1.5	.85	.07	0
19	.05	.58	e.52	6.3	2.7	1.4	2.3	.25	13	1.1	0	0
20	.01	25	e.48	5.2	3.1	2.0	2.1	5.8	11	1.5	0	0
21	.27	6.1	.50	4.0	12	25	1.8	2.0	17	.73	0	1.3
22	.13	3.6	.51	3.5	7.3	16	1.5	1.1	11	2.3	0	.95
23	.05	2.6	5.9	3.1	5.9	22	1.3	.90	6.8	3.3	0	.40
24	.07	2.0	3.4	2.8	4.8	16	1.1	.56	4.5	2.8	0	.17
25	0	1.6	2.7	2.5	4.2	11	.98	.41	3.2	1.3	0	2.3
26	.01	3.4	2.3	2.3	4.0	7.8	.87	.29	2.2	.83	.71	1.3
27	.01	12	2.1	2.3	6.6	5.8	.76	.20	1.6	.61	.05	.64
28	0	8.3	2.7	2.0	45	4.5	.65	.13	1.2	.48	.02	.46
29	.37	5.5	2.0	1.8	---	23	.54	.06	1.0	.41	0	1.6
30	.16	5.3	3.1	5.5	---	40	.51	.02	1.2	.35	17	2.6
31	.16	---	27	3.2	---	19	---	0	---	.34	2.4	---
TOTAL	13.99	91.62	75.12	293.9	181.6	464.1	238.31	26.27	101.64	128.71	25.40	13.03
MEAN	.45	3.05	2.42	9.48	6.49	15.0	7.94	.85	3.39	4.15	.82	.43
MAX	4.6	25	27	35	45	64	39	5.8	17	25	17	2.6
MIN	0	.07	.48	1.8	2.3	1.4	.51	0	0	.34	0	0
CFSM	.14	.96	.76	2.97	2.03	4.69	2.49	.27	1.06	1.30	.26	.14
IN.	.16	1.07	.88	3.43	2.12	5.41	2.78	.31	1.19	1.50	.30	.15

CAL YR 1988 TOTAL 644.47 MEAN 1.76 MAX 27 MIN 0 CFSM .55 IN. 7.52
WTR YR 1989 TOTAL 1653.69 MEAN 4.53 MAX 64 MIN 0 CFSM 1.42 IN. 19.28

e Estimated

0242340550 COX CREEK NEAR CAHABA HEIGHTS, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1986 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV											
17...	1330	0.76	88	--	6.30	15.5	750	7.8	79	660	330
DEC											
20...	1145	0.46	72	--	6.30	7.5	752	11.8	100	2500	190
JAN											
18...	1035	7.6	41	--	6.40	9.0	751	10.9	96	1300	63
FEB											
22...	1045	7.5	45	--	6.10	9.5	746	10.0	89	420	570
MAR											
22...	1030	17	35	--	6.90	13.0	745	10.0	97	350	250
APR											
19...	1045	2.6	44	47	6.80	18.0	747	9.2	99	4900	110
MAY											
16...	0930	0.58	65	--	6.40	16.0	746	8.8	91	860	1000
JUN											
19...	1030	2.5	62	--	6.60	21.5	744	7.4	86	1400	6300
JUL											
19...	0930	1.1	59	--	6.40	23.0	743	8.3	99	6000	2200

DATE	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)
NOV											
17...	--	--	--	--	--	--	--	--	--	30	--
DEC											
20...	--	--	--	--	--	--	--	--	--	25	--
JAN											
18...	--	--	--	--	--	--	--	--	--	11	--
FEB											
22...	--	--	--	--	--	--	--	--	--	13	--
MAR											
22...	--	--	--	--	--	--	--	--	--	11	--
APR											
19...	15	0	3.5	1.4	2.1	22	0.2	1.2	6.46	16	3.9
MAY											
16...	--	--	--	--	--	--	--	--	--	21	--
JUN											
19...	--	--	--	--	--	--	--	--	--	39	--
JUL											
19...	--	--	--	--	--	--	--	--	--	20	--

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR											
19...	2.2	0.20	8.0	28	32	0.04	0.19	0.060	0.010	0.070	0.020
JUL											
19...	--	--	--	--	--	--	--	.130	.010	.140	.020

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR											
19...	2.0	2.0	2.1	0.020	0.010	0.01	<20	700	150	40	30
JUL											
19...	.36	.38	.52	.050	.020	.03	--	--	--	--	--

02423409 LAKE PURDY NEAR CAHABA HEIGHTS, AL

LOCATION.--Lat 33°27'35", long 86°40'06", in SE¼ sec. 17, T. 18 S., R. 1 W., Shelby County, Hydrologic Unit 03150202, attached to left side of control room, at upstream side spillway, 0.2 mi upstream from Big Branch, 4.0 mi east of Cahaba Heights, and 4.3 mi upstream from mouth.

DRAINAGE AREA.--42.7 mi^2.

WATER-STAGE RECORDS

PERIOD OF RECORD.--June 1985 to current year (gage heights only).

GAGE.--Water-stage recorder. Elevation of gage is 551 ft above National Geodetic Vertical Datum of 1929, from topographic map. Birmingham Waterworks Board satellite telemeter at gage.

REMARKS.--Water-stage records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 61.46 ft, Jan. 19, 1987, Mar. 5, 1989; minimum, 43.35 ft, Dec. 14, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 61.46 ft, Mar. 5; minimum, 52.40 ft, Nov. 4.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.67	52.93	56.85	59.01	60.22	60.60	60.50	60.22	59.63	60.28	60.19	58.19
2	55.26	52.76	56.97	59.32	60.21	60.48	60.42	60.21	59.54	61.10	60.21	58.23
3	55.51	52.61	57.08	59.60	60.20	60.40	60.40	60.19	59.47	60.96	60.24	58.21
4	55.64	52.47	57.19	59.86	60.20	0.56	60.50	60.19	59.48	60.69	60.21	58.18
5	55.74	52.63	57.28	60.05	60.20	61.32	60.82	60.23	59.59	60.83	60.18	58.07
6	55.82	52.74	57.36	60.17	60.23	60.94	60.64	60.27	59.71	60.70	60.12	57.96
7	55.87	52.82	57.45	60.23	60.32	60.55	60.53	60.22	59.78	60.61	60.05	57.82
8	55.87	52.90	57.53	60.24	60.33	60.48	60.47	60.19	59.85	60.47	59.99	57.70
9	55.83	52.98	57.60	60.26	60.29	60.44	60.57	60.18	59.93	60.39	59.94	57.56
10	55.76	53.05	57.67	60.32	60.27	60.40	60.51	60.19	59.99	60.43	59.86	57.47
11	55.68	53.06	57.72	60.35	60.26	60.37	60.44	60.18	60.02	60.38	59.76	57.54
12	55.58	53.04	57.74	60.38	60.25	60.34	60.39	60.16	59.98	60.33	59.66	57.50
13	55.46	53.14	57.71	60.61	60.24	60.32	60.37	60.15	59.98	60.31	59.56	57.47
14	55.31	53.24	57.70	60.59	60.23	60.30	60.34	60.18	59.96	60.28	59.45	57.39
15	55.18	53.32	57.69	60.54	60.23	60.29	60.35	60.20	60.16	60.26	59.34	57.27
16	55.07	53.41	57.68	60.47	60.22	60.28	60.33	60.18	60.25	60.25	59.30	57.19
17	54.90	53.46	57.62	60.40	60.21	60.26	60.30	60.17	60.23	60.24	59.25	57.10
18	54.73	53.49	57.59	60.33	60.21	60.25	60.28	60.16	60.21	60.24	59.25	56.97
19	54.63	53.55	57.55	60.13	60.21	60.24	60.27	60.15	60.23	60.24	59.21	56.84
20	54.47	54.18	57.49	60.05	60.22	60.25	60.26	60.19	60.35	60.27	59.12	56.70
21	54.38	54.83	57.43	60.11	60.33	60.50	60.25	60.21	60.70	60.25	59.02	56.61
22	54.31	55.05	57.39	60.18	60.33	60.55	60.24	60.19	60.78	60.25	58.90	56.99
23	54.17	55.23	57.48	60.20	60.29	60.54	60.23	60.18	60.61	60.29	58.77	57.22
24	54.06	55.37	57.65	60.21	60.26	60.54	60.23	60.17	60.44	60.31	58.65	57.30
25	53.93	55.49	57.75	60.21	60.25	60.47	60.22	60.15	60.35	60.28	58.51	57.37
26	53.79	55.62	57.83	60.21	60.24	60.42	60.22	60.10	60.30	60.25	58.43	57.70
27	53.63	55.98	57.90	60.21	60.25	60.37	60.21	60.04	60.25	60.24	58.33	57.86
28	53.48	56.31	57.99	60.20	60.66	60.34	60.21	59.95	60.23	60.22	58.23	57.97
29	53.36	56.53	58.06	60.20	---	60.36	60.20	59.88	60.21	60.21	58.12	58.08
30	53.20	56.71	58.15	60.23	---	60.77	60.20	59.79	60.21	60.20	58.07	58.27
31	53.06	---	58.44	60.23	---	60.64	---	59.71	---	60.20	58.21	---
MEAN	54.79	53.96	57.60	60.16	60.26	60.47	60.36	60.13	60.08	60.39	59.29	57.56
MAX	55.87	56.71	58.44	60.61	60.66	61.32	60.82	60.27	60.78	61.10	60.24	58.27
MIN	53.06	52.47	56.85	59.01	60.20	60.24	60.20	59.71	59.47	60.20	58.07	56.61

CAL YR 1988 MEAN 55.76 MAX 60.28 MIN 45.64
WTR YR 1989 MEAN 58.75 MAX 61.32 MIN 52.47

02423409 LAKE PURDY NEAR CAHABA HEIGHTS, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT												
19...	0900	--	--	235	243	7.90	20.0	--	748	8.0	90	8
NOV												
16...	0945	--	--	248	--	7.40	17.0	--	745	8.7	92	6
DEC												
19...	0845	--	--	280	--	--	9.0	--	753	8.8	77	1
JAN												
17...	0930	--	--	265	270	7.80	11.0	--	754	8.8	81	3
FEB												
21...	1145	--	--	265	--	7.70	12.0	--	740	10.0	96	1
MAR												
21...	0900	--	--	230	--	7.60	16.0	--	743	9.2	96	K2
APR												
17...	1215	--	--	232	227	8.00	17.0	--	748	10.4	110	K1
MAY												
15...	0915	--	--	239	--	7.60	20.0	--	744	8.7	98	K3
24...	0943	25.0	--	239	--	8.50	25.0	77.0	--	9.3	--	--
24...	0944	25.0	5.0	238	--	8.50	24.5	--	--	9.1	--	--
24...	0945	25.0	10.0	239	--	8.40	23.0	--	--	9.0	--	--
24...	0946	25.0	15.0	248	--	7.70	18.5	--	--	4.8	--	--
24...	0947	25.0	20.0	241	--	7.30	17.0	--	--	1.2	--	--
24...	0948	25.0	25.0	240	--	7.20	14.0	--	--	.5	--	--
24...	0949	25.0	30.0	242	--	7.20	14.0	--	--	.3	--	--
24...	0950	25.0	35.0	242	--	7.20	13.5	--	--	.2	--	--
24...	0951	25.0	40.0	243	--	7.20	13.5	--	--	.2	--	--
24...	0953	50.0	--	239	--	8.50	25.0	--	--	9.1	--	--
24...	0954	50.0	5.0	238	--	8.50	24.5	--	--	8.7	--	--
24...	0955	50.0	10.0	239	--	8.40	22.5	--	--	8.8	--	--
24...	0956	50.0	15.0	247	--	7.80	18.5	--	--	5.4	--	--
24...	0957	50.0	20.0	243	--	7.50	17.0	--	--	1.6	--	--
24...	0958	50.0	25.0	242	--	7.30	14.0	--	--	.6	--	--
24...	0959	50.0	30.0	24[illegible]	--	7.30	14.0	--	--	.3	--	--
24...	1000	50.0	35.0	243	--	7.30	13.5	--	--	.3	--	--
24...	1001	50.0	40.0	245	--	7.30	13.5	--	--	.3	--	--
24...	1002	50.0	45.0	243	--	7.30	13.5	--	--	.1	--	--
24...	1003	50.0	50.0	245	--	7.30	13.5	--	--	.1	--	--
24...	1005	75.0	--	238	--	8.50	25.0	--	--	9.0	--	--
24...	1006	75.0	5.0	238	--	8.50	24.5	--	--	8.4	--	--
24...	1007	75.0	10.0	239	--	8.40	23.0	--	--	8.6	--	--
24...	1008	75.0	15.0	245	--	7.60	18.5	--	--	4.8	--	--
24...	1009	75.0	20.0	240	--	7.40	16.5	--	--	1.1	--	--
24...	1010	75.0	25.0	241	--	7.30	14.0	--	--	.4	--	--
JUN												
20...	0900	--	--	230	--	8.20	25.0	--	743	8.5	106	18
JUL												
17...	1145	--	--	225	243	7.60	26.5	--	745	8.6	110	K3

02423409 LAKE PURDY NEAR CAHABA HEIGHTS, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 19...	--	110	8	34	5.5	4.3	8	0.2	4.9	8.10	100	17
NOV 16...	8	--	--	--	--	--	--	--	--	--	110	--
DEC 19...	2	--	--	--	--	--	--	--	--	--	--	--
JAN 17...	4	120	4	41	5.3	3.9	6	.2	4.5	7.75	120	17
FEB 21...	4	--	--	--	--	--	--	--	--	--	120	--
MAR 21...	K3	--	--	--	--	--	--	--	--	--	105	--
APR 17...	K4	110	11	37	3.9	2.9	5	.1	2.9	7.59	98	12
MAY 15...	K15	--	--	--	--	--	--	--	--	--	110	--
JUN 20...	20	--	--	--	--	--	--	--	--	--	108	--
JUL 17...	K5	120	2	39	4.3	2.8	5	.1	2.9	7.37	113	9.8

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
OCT 19...	4.1	0.10	0.20	144	130	0.20	0	0.010	<.010	0.020	0.010	0.38
JAN 17...	4.3	.10	4.5	163	153	0.22		.120	.020	.140	.080	.37
APR 17...	3.0	.30	4.9	123	126	0.17		.100	.010	.110	.010	.67
JUL 17...	2.8	.20	6.8	144	136	0.20		--	<.010	<.020	.060	.36

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
OCT 19...	0.39	0.41	0.020	0.010	0.01	--	--	30	--	--	--	--
JAN 17...	.45	.59	.020	.010	.01	--	--	20	--	--	--	--
APR 17...	.68	.79	.020	<.010	.02	<1	<1	<20	1	<1	1	<1
JUL 17...	.42	--	.040	.020	.02	--	--	<20	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT 19...	110	10	--	--	30	<10	--	--	--	--	--	--
JAN 17...	150	20	--	--	30	<10	--	--	--	--	--	--
APR 17...	110	20	<5	<5	10	<10	<.10	<.1	<1	<1	1	<1.0
JUL 17...	--	140	--	--	--	--	--	--	--	--	--	--

02423409 LAKE PURDY NEAR CAHABA HEIGHTS, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)
AUG							
02...	0925	25.0	--	212	8.40	29.0	48.0
02...	0926	25.0	5.0	213	8.40	29.0	--
02...	0927	25.0	7.0	215	8.40	28.5	--
02...	0928	25.0	10.0	225	7.70	26.0	--
02...	0929	25.0	12.0	232	7.20	24.5	--
02...	0930	25.0	15.0	232	7.00	23.5	--
02...	0931	25.0	17.0	235	7.20	21.5	--
02...	0932	25.0	20.0	244	7.40	20.0	--
02...	0933	25.0	25.0	251	7.50	17.5	--
02...	0934	25.0	30.0	244	7.20	15.5	--
02...	0935	25.0	35.0	243	7.50	15.0	--
02...	0936	25.0	40.0	242	7.50	15.0	--
02...	0937	25.0	45.0	243	7.50	15.0	--
02...	0938	25.0	48.0	243	7.60	15.0	--
02...	0940	50.0	--	211	8.60	29.0	--
02...	0941	50.0	5.0	212	8.40	29.0	--
02...	0942	50.0	7.0	214	8.40	29.0	--
02...	0943	50.0	10.0	228	7.70	25.5	--
02...	0944	50.0	12.0	232	7.40	24.5	--
02...	0945	50.0	15.0	232	7.20	23.5	--
02...	0946	50.0	17.0	238	7.40	21.5	--
02...	0947	50.0	20.0	246	7.40	20.0	--
02...	0948	50.0	25.0	254	7.60	17.0	--
02...	0949	50.0	30.0	246	7.60	15.5	--
02...	0950	50.0	35.0	243	7.30	15.0	--
02...	0951	50.0	40.0	242	7.40	15.0	--
02...	0952	50.0	45.0	243	7.30	15.0	--
02...	0953	50.0	50.0	245	7.60	15.0	--
02...	0955	75.0	--	214	7.80	29.0	--
02...	0956	75.0	5.0	213	8.10	29.0	--
02...	0957	75.0	7.0	216	8.10	29.0	--
02...	0958	75.0	10.0	232	7.60	25.5	--
02...	0959	75.0	12.0	232	7.60	24.5	--
02...	1000	75.0	15.0	230	7.30	23.5	--
02...	1001	75.0	17.0	237	7.30	21.5	--
02...	1002	75.0	20.0	246	7.30	20.0	--
02...	1003	75.0	25.0	252	7.40	17.5	--
02...	1004	75.0	30.0	243	7.60	15.5	--
22...	0950	--	--	240	7.30	25.0	--
SEP							
18...	1145	--	--	260	7.60	25.5	--

02423409 LAKE PURDY NEAR CAHABA HEIGHTS, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3
AUG						
02...	--	7.7	--	--	--	--
02...	--	7.8	--	--	--	--
02...	--	8.0	--	--	--	--
02...	--	5.1	--	--	--	--
02...	--	3.0	--	--	--	--
02...	--	1.1	--	--	--	--
02...	--	.2	--	--	--	--
02...	--	.1	--	--	--	--
02...	--	.1	--	--	--	--
02...	--	.1	--	--	--	--
02...	--	.1	--	--	--	--
02...	--	.1	--	--	--	--
02...	--	.1	--	--	--	--
02...	--	.1	--	--	--	--
02...	--	7.6	--	--	--	--
02...	--	7.7	--	--	--	--
02...	--	7.9	--	--	--	--
02...	--	6.2	--	--	--	--
02...	--	3.1	--	--	--	--
02...	--	2.1	--	--	--	--
02...	--	.9	--	--	--	--
02...	--	.9	--	--	--	--
02...	--	.9	--	--	--	--
02...	--	.9	--	--	--	--
02...	--	.8	--	--	--	--
02...	--	.7	--	--	--	--
02...	--	.6	--	--	--	--
02...	--	.6	--	--	--	--
02...	--	7.5	--	--	--	--
02...	--	7.6	--	--	--	--
02...	--	7.9	--	--	--	--
02...	--	5.4	--	--	--	--
02...	--	2.6	--	--	--	--
02...	--	1.4	--	--	--	--
02...	--	.3	--	--	--	--
02...	--	.2	--	--	--	--
02...	--	.1	--	--	--	--
02...	--	.1	--	--	--	--
22...	747	7.4	92	K1	K3	118
SEP						
18...	746	7.7	96	K1	K2	115

02423410 LITTLE CAHABA RIVER BELOW LAKE PURDY DAM NEAR CAHABA HEIGHTS, AL

LOCATION.--Lat 33°27'36", long 86°40'13", in SW¼ sec. 17, T. 18 S., R. 1 W., Shelby County, Hydrologic Unit 03150202, on left bank, 600 ft downstream from Lake Purdy Dam, 0.1 mi upstream from Big Branch, 3.8 mi east of Cahaba Heights, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--42.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder with sharp crested and V-notch weirs. Elevation of gage is 480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Water-discharge records good except those above 250 ft³/s, which are fair. Flow completely regulated by Lake Purdy Reservoir.

AVERAGE DISCHARGE.--5 years, 53.1 ft³/s, 16.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,330 ft³/s, Jan. 19, 1987, gage height, 4.58 ft; minimum, 0.90 ft³/s, Oct. 28, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,110 ft³/s, Mar. 5, gage height, 4.51 ft; minimum discharge, 1.5 ft³/s, many days in November.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	75	1.8	2.0	52	280	207	52	52	95	39	39
2	1.6	76	1.8	2.0	49	207	157	48	69	577	46	25
3	1.8	76	1.8	2.0	48	158	142	42	37	475	60	44
4	1.7	73	1.8	2.0	45	228	203	44	38	323	47	47
5	1.8	2.0	1.8	2.1	48	837	383	64	12	398	55	75
6	1.8	1.6	1.8	20	61	581	291	82	1.8	327	61	81
7	24	1.6	1.8	50	103	333	230	58	1.8	281	64	85
8	34	1.6	1.8	68	109	210	191	46	16	204	41	65
9	47	1.6	1.8	73	91	180	254	42	3.0	149	53	91
10	54	1.6	1.8	92	78	150	219	46	1.9	173	66	72
11	65	39	23	123	71	127	174	42	52	138	72	41
12	60	34	16	134	66	112	138	37	24	109	72	60
13	73	1.6	44	182	61	97	121	33	41	98	72	46
14	79	3.1	25	301	57	88	106	42	37	84	82	90
15	66	1.6	42	273	55	80	113	52	37	73	69	70
16	71	1.5	31	251	52	73	103	45	74	66	87	47
17	94	20	45	181	50	65	87	39	65	63	48	74
18	89	1.7	36	179	51	62	78	34	52	61	36	77
19	59	23	41	194	52	57	72	33	66	62	61	80
20	91	2.2	58	93	58	57	68	46	126	75	70	82
21	51	1.6	49	20	109	203	64	55	329	65	72	65
22	64	1.6	42	43	114	243	58	45	374	65	85	2.6
23	74	1.6	20	54	90	236	53	44	283	83	82	1.8
24	61	1.7	2.1	57	71	234	50	35	183	96	84	14
25	68	1.7	2.3	55	66	187	49	32	128	78	84	29
26	81	1.7	2.6	53	62	151	46	65	96	66	68	1.8
27	78	1.8	2.4	54	67	126	43	62	74	58	71	1.8
28	74	1.8	1.9	49	294	106	42	57	64	51	71	1.8
29	74	1.8	2.0	46	---	120	39	69	57	47	75	1.8
30	74	1.8	1.9	61	---	358	41	58	56	44	88	1.9
31	72	---	2.1	59	---	291	---	71	---	42	52	---
TOTAL	1710.7	454.8	507.3	2775.1	2130	6237	3822	1520	2450.5	4526	2033	1412.5
MEAN	55.2	15.2	16.4	89.5	76.1	201	127	49.0	81.7	146	65.6	47.1
MAX	94	76	58	301	294	837	383	82	374	577	88	91
MIN	1.6	1.5	1.8	2.0	45	57	39	32	1.8	42	36	1.8
CFSM	1.29	.36	.38	2.10	1.78	4.71	2.98	1.15	1.91	3.42	1.54	1.10
IN.	1.49	.40	.44	2.42	1.86	5.43	3.33	1.32	2.13	3.94	1.77	1.23

CAL YR 1988 TOTAL 10528.6 MEAN 28.8 MAX 101 MIN 1.0 CFSM .67 IN. 9.17
WTR YR 1989 TOTAL 29578.9 MEAN 81.0 MAX 837 MIN 1.5 CFSM 1.90 IN. 25.77

02423410 LITTLE CAHABA RIVER BELOW LAKE PURDY DAM NEAR CAHABA HEIGHTS, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1986 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
OCT 19...	0930	62	241	249	7.80	19.0	748	8.8	97	8	--	110
NOV 16...	1020	1.6	240	--	7.40	17.0	745	8.8	93	3	120	--
DEC 19...	0920	41	260	--	--	10.0	753	11.4	102	1	4	--
JAN 17...	1015	163	265	273	7.80	11.0	754	10.7	98	4	2	120
FEB 21...	1215	117	262	--	7.90	11.5	740	10.6	100	2	3	--
MAR 21...	0930	222	222	--	7.90	15.0	743	9.4	96	K4	K14	--
APR 17...	1300	86	220	221	8.40	18.0	748	9.6	103	K0	K2	100
MAY 15...	1000	52	230	--	8.10	20.0	744	8.7	98	K1	60	--
JUN 20...	0930	132	230	--	8.30	25.0	743	7.8	97	21	33	--
JUL 17...	1245	64	228	215	8.30	27.0	745	7.9	102	K2	K18	97
AUG 22...	0900	86	250	--	7.70	17.0	747	9.4	99	K5	61	--
SEP 18...	1230	62	255	--	7.50	19.5	745	8.4	94	K7	K7	--

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 19...	1	35	5.7	4.3	7	0.2	4.8	8.30	110	17	4.2	0.10
NOV 16...	--	--	--	--	--	--	--	--	110	--	--	--
JAN 17...	0	41	5.4	3.9	6	.2	4.5	7.85	130	17	4.2	.20
FEB 21...	--	--	--	--	--	--	--	--	120	--	--	--
MAR 21...	--	--	--	--	--	--	--	--	103	--	--	--
APR 17...	5	35	3.8	2.9	6	.1	2.8	7.75	98	11	3.0	.20
MAY 15...	--	--	--	--	--	--	--	--	110	--	--	--
JUN 20...	--	--	--	--	--	--	--	--	108	--	--	--
JUL 17...	2	33	3.6	2.5	5	.1	2.7	7.46	95	10	2.5	.20
AUG 22...	--	--	--	--	--	--	--	--	126	--	--	--
SEP 18...	--	--	--	--	--	--	--	--	133	--	--	--

02423410 LITTLE CAHABA RIVER BELOW LAKE PURDY DAM NEAR CAHABA HEIGHTS, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)
OCT 19...	1.1	150	138	0.20	25.1	0.030	0.010	0.040	0.100	0.37	0.47	0.51
JAN 17...	4.5	161	159	.22	70.9	.120	.020	.140	.070	.35	.42	.56
APR 17...	4.1	124	122	.17	28.9	.030	.010	.040	<.010	--	.44	.48
JUL 17...	5.1	123	117	.17	21.2	--	<.010	<.020	<.010	--	.51	--

DATE	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT 19...	0.030	0.010	0.02	--	--	30	--	--	--	--	140
JAN 17...	.120	.010	.11	--	--	20	--	--	--	--	100
APR 17...	.020	<.010	.02	<1	<1	<20	<1	<1	1	<1	80
JUL 17...	.030	.010	.02	--	--	<20	--	--	--	--	80

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)
OCT 19...	<10	--	--	70	30	--	--	--	--	--	--
JAN 17...	10	--	--	20	<10	--	--	--	--	--	--
APR 17...	10	<5	<5	10	<10	<.10	<.1	<1	<1	<1	<1.0
JUL 17...	20	--	--	30	<10	--	--	--	--	--	--

02423496 CAHABA RIVER NEAR HOOVER, AL

LOCATION.--Lat 33°22'09", long 86°47'03", in NE¼ sec. 19, T. 19 S., R. 2 W., Jefferson County, Hydrologic Unit 03150202, near Cahaba River Sewage Treatment Plant, 1.1 mi upstream from U.S. Highway 31, 2.1 mi upstream from station 02423500, and at mile 138.9.

DRAINAGE AREA.--226 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- May 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 379.56 ft above National Geodetic Vertical Datum of 1929 (levels by Jefferson County Engineering Department).

REMARKS.--Estimated daily discharge: May 24-31, 1989. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,960 ft³/s, Mar. 5, 1989, gage height, 26.87 ft; minimum, daily discharge, 4.0 ft³/s, June 7, 8, July 9, 1988.

EXTREMES FOR CURRENT PERIOD.--May to September 1988. Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 17	1900	*2,540	*11.53				

Minimum daily discharge, 4.0 ft³/s, June 7, 8, July 9.

Water year 1989: Peak discharge greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 5	1100	*8,960	*26.87	July 3	0100	6,060	20.48
June 21	1415	5,640	19.50				

Minimum daily discharge, 5.5 ft³/s, Oct. 15-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	20	5.0	4.9	29	9.3
2	---	---	---	---	---	---	---	17	4.9	5.4	14	9.4
3	---	---	---	---	---	---	---	15	4.6	5.3	12	28
4	---	---	---	---	---	---	---	22	4.4	6.6	19	130
5	---	---	---	---	---	---	---	18	4.2	12	14	59
6	---	---	---	---	---	---	---	17	4.1	6.6	20	17
7	---	---	---	---	---	---	---	15	4.0	4.8	53	12
8	---	---	---	---	---	---	---	14	4.0	4.2	23	11
9	---	---	---	---	---	---	---	16	4.1	4.0	13	9.9
10	---	---	---	---	---	---	---	128	4.2	4.4	12	13
11	---	---	---	---	---	---	---	87	4.2	8.6	17	13
12	---	---	---	---	---	---	---	42	4.1	11	16	27
13	---	---	---	---	---	---	---	12	4.2	6.5	13	237
14	---	---	---	---	---	---	---	9.0	4.3	5.1	11	92
15	---	---	---	---	---	---	---	7.9	4.2	5.3	10	24
16	---	---	---	---	---	---	---	7.2	4.3	105	10	341
17	---	---	---	---	---	---	---	7.0	4.2	60	11	1670
18	---	---	---	---	---	---	---	6.6	4.1	14	12	955
19	---	---	---	---	---	---	---	6.1	5.6	11	11	391
20	---	---	---	---	---	---	---	5.9	6.0	11	24	199
21	---	---	---	---	---	---	---	5.9	4.7	23	21	262
22	---	---	---	---	---	---	---	6.4	5.1	36	12	96
23	---	---	---	---	---	---	---	7.0	4.7	94	11	42
24	---	---	---	---	---	---	---	23	4.9	62	15	24
25	---	---	---	---	---	---	---	17	5.1	20	15	17
26	---	---	---	---	---	---	---	9.8	4.7	17	11	15
27	---	---	---	---	---	---	---	8.5	5.6	27	10	14
28	---	---	---	---	---	---	---	6.7	5.1	91	9.5	15
29	---	---	---	---	---	---	---	5.9	4.8	17	9.3	24
30	---	---	---	---	---	---	---	5.3	4.8	12	9.3	23
31	---	---	---	---	---	---	---	5.2	---	142	9.3	---
TOTAL	---	---	---	---	---	---	---	573.4	138.2	836.7	476.4	4779.6
MEAN	---	---	---	---	---	---	---	18.5	4.61	27.0	15.4	159
MAX	---	---	---	---	---	---	---	128	6.0	142	53	1670
MIN	---	---	---	---	---	---	---	5.2	4.0	4.0	9.3	9.3
CFSM	---	---	---	---	---	---	---	.08	.02	.12	.07	.70
IN.	---	---	---	---	---	---	---	.09	.02	.14	.08	.79

02423496 CAHABA RIVER NEAR HOOVER, AL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	7.8	262	1530	164	1990	899	72	18	369	33	26
2	521	7.1	184	805	137	1040	618	194	17	3930	43	26
3	330	8.3	137	598	122	707	548	106	18	4460	57	15
4	192	75	103	743	122	2320	974	74	40	2230	36	12
5	93	392	75	529	139	8380	3170	241	78	2220	19	10
6	32	267	49	432	239	3950	1680	420	62	1810	15	9.3
7	17	112	33	414	620	1790	1050	271	57	1290	16	8.2
8	12	49	26	359	677	1020	801	173	54	873	15	7.8
9	11	33	23	386	479	742	1340	122	80	695	14	7.5
10	10	21	17	708	367	558	942	143	69	674	11	7.4
11	7.4	19	15	993	307	453	671	159	58	520	10	11
12	6.6	18	14	1640	264	381	524	90	76	400	9.5	24
13	5.9	63	14	3700	221	323	420	55	32	341	9.2	43
14	5.6	46	18	2350	187	271	349	87	39	272	8.9	15
15	5.5	38	15	1690	164	241	403	115	793	215	9.9	9.4
16	5.5	24	14	1190	143	205	362	82	1610	166	15	9.2
17	5.5	19	14	819	119	166	289	46	621	138	18	7.8
18	8.4	16	15	618	124	149	232	31	353	98	77	7.3
19	12	15	13	577	145	133	202	22	435	98	11	6.7
20	6.4	1780	12	432	156	127	201	131	839	160	9.2	6.4
21	17	1250	12	265	538	1120	171	153	4200	146	8.3	67
22	8.3	493	12	232	595	1190	143	88	3060	130	7.9	339
23	6.9	308	147	214	424	1240	120	66	2140	131	7.6	145
24	7.5	208	209	193	315	1440	102	e45	1030	187	7.5	26
25	6.9	147	143	170	259	906	80	e29	627	117	7.2	104
26	6.5	129	98	150	231	631	67	e21	432	76	7.2	384
27	6.5	633	66	143	232	487	57	e19	303	51	24	150
28	6.3	755	71	129	2630	386	46	e17	248	33	9.0	38
29	19	531	65	109	---	479	40	e16	208	24	8.0	40
30	7.3	359	81	196	---	2710	29	e15	183	20	7.9	70
31	7.4	---	941	210	---	1620	---	e18	---	111	127	---
TOTAL	1525.4	7823.2	2898	22524	10120	37155	16530	3121	17780	21985	658.3	1632.0
MEAN	49.2	261	93.5	727	361	1199	551	101	593	709	21.2	54.4
MAX	521	1780	941	3700	2630	8380	3170	420	4200	4460	127	384
MIN	5.5	7.1	12	109	119	127	29	15	17	20	7.2	6.4
CPSM	.22	1.15	.41	3.21	1.60	5.30	2.44	.45	2.62	3.14	.09	.24
IN.	.25	1.29	.48	3.71	1.67	6.12	2.72	.51	2.93	3.62	.11	.27

WTR YR 1989 TOTAL 143751.9 MEAN 394 MAX 8380 MIN 5.5 CPSM 1.74 IN. 23.66

e Estimated

02423496 CAHABA RIVER NEAR HOOVER, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1988 to September 1989.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1988 to September 1989.
WATER TEMPERATURE: November 1988 to September 1989.
DISSOLVED OXYGEN: November 1988 to September 1989.

INSTRUMENTATION.--Water-quality monitor since November 1988.

REMARKS.--Interruptions in the daily record were due to malfunctions of the instrument.

EXTREMES FOR THE CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 255 microsiemens, Aug. 18; minimum, 95 microsiemens, June 4.
WATER TEMPERATURE: Maximum, 29.5°C, Aug. 6; minimum, 3.6°C, Dec. 19.
DISSOLVED OXYGEN: Maximum, 12.0 mg/L, Dec. 20, Mar. 9; minimum, 2.8 mg/L, Sept. 14.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	179	176	177	149	143	146
2	---	---	---	---	---	---	181	178	180	147	142	144
3	---	---	---	---	---	---	184	180	182	145	142	144
4	---	---	---	---	---	---	187	183	185	143	126	134
5	---	---	---	---	---	---	188	186	187	135	132	133
6	---	---	---	---	---	---	194	188	191	141	133	136
7	---	---	---	---	---	---	198	193	195	165	142	154
8	---	---	---	---	---	---	201	196	199	177	166	173
9	---	---	---	---	---	---	203	201	201	181	178	180
10	---	---	---	---	---	---	204	201	202	183	172	177
11	---	---	---	---	---	---	206	203	205	171	161	168
12	---	---	---	---	---	---	207	205	206	161	140	152
13	---	---	---	---	---	---	207	206	206	139	125	130
14	---	---	---	---	---	---	209	206	207	144	132	138
15	---	---	---	---	---	---	208	204	206	150	143	146
16	---	---	---	---	---	---	208	204	206	155	150	153
17	---	---	---	---	---	---	215	208	211	163	155	159
18	---	---	---	---	---	---	216	212	214	170	163	167
19	---	---	---	---	---	---	217	213	215	187	169	183
20	---	---	---	---	---	---	220	214	217	200	157	181
21	---	---	---	---	---	---	223	220	221	205	159	183
22	---	---	---	---	---	---	227	223	225	172	159	166
23	---	---	---	137	128	133	232	148	188	189	173	181
24	---	---	---	144	138	141	229	181	211	196	187	192
25	---	---	---	153	143	148	225	216	223	205	196	201
26	---	---	---	164	121	153	221	206	214	213	202	206
27	---	---	---	172	132	159	206	202	204	213	208	211
28	---	---	---	177	169	173	203	193	201	221	213	218
29	---	---	---	177	176	176	200	192	197	221	213	216
30	---	---	---	178	176	177	203	184	199	219	190	205
31	---	---	---	---	---	---	184	140	164	215	207	212
MONTH	---	---	---	---	---	---	232	140	201	221	125	171

02423496 CAHABA RIVER NEAR HOOVER, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	213	204	208	130	116	122	133	128	131	216	202	212
2	217	211	213	145	131	137	141	133	136	219	210	216
3	221	215	218	153	145	148	144	137	141	213	206	209
4	221	216	219	159	119	147	147	123	140	210	205	207
5	226	194	216	125	105	111	124	118	120	206	131	184
6	209	190	203	125	107	118	124	119	121	204	175	195
7	188	161	174	131	124	127	131	123	127	202	177	188
8	160	153	156	134	131	133	136	129	133	202	192	196
9	157	150	153	159	132	136	137	129	133	198	193	195
10	152	148	150	146	138	142	133	132	132	197	185	194
11	156	152	154	153	146	149	138	133	135	200	188	196
12	160	155	158	157	153	155	143	138	140	194	190	192
13	165	159	162	162	156	160	150	143	146	197	193	195
14	170	164	167	168	159	165	158	150	153	210	186	200
15	177	168	172	174	168	172	162	158	159	221	198	210
16	181	176	177	180	171	176	167	161	163	228	221	226
17	189	177	184	184	178	180	169	166	168	233	228	230
18	187	177	183	195	184	187	170	165	168	235	219	225
19	183	179	181	195	191	193	176	166	171	220	214	218
20	185	180	183	198	179	191	178	170	174	219	126	194
21	182	133	162	180	123	152	177	171	173	202	176	196
22	156	148	151	151	139	147	182	173	177	209	197	203
23	155	152	153	148	137	142	185	180	182	212	202	207
24	153	150	151	137	129	132	190	185	188	220	205	210
25	155	149	152	133	130	131	194	188	192	224	212	218
26	155	152	153	139	133	136	199	193	195	226	211	219
27	163	128	156	147	138	142	207	199	204	230	215	223
28	129	105	122	153	147	150	212	208	210	230	216	225
29	---	---	---	155	125	151	219	211	214	225	211	220
30	---	---	---	133	117	124	214	213	213	237	221	228
31	---	---	---	130	123	126	---	---	---	239	223	228
MONTH	226	105	173	198	105	148	219	118	161	239	126	208
		JUNE			JULY			AUGUST			SEPTEMBER	
1	223	220	222	175	169	173	215	211	213	235	181	225
2	224	216	219	169	102	139	218	186	212	236	200	221
3	231	216	218	111	101	106	198	146	179	238	232	235
4	228	95	201	115	105	112	202	196	198	234	230	232
5	204	151	177	120	109	114	210	203	205	235	229	231
6	194	156	181	124	115	119	208	204	206	236	231	232
7	219	191	204	135	124	129	212	207	210	231	169	194
8	220	186	209	145	133	139	216	204	211	185	172	176
9	191	160	175	150	142	147	205	200	203	188	176	179
10	201	189	195	154	148	149	204	200	202	189	175	182
11	202	152	190	164	153	159	206	201	204	229	176	198
12	198	161	183	167	146	159	211	206	209	---	---	---
13	202	195	198	166	156	162	214	210	212	---	---	---
14	202	98	194	171	160	167	219	213	217	220	207	212
15	192	148	173	177	165	173	221	218	220	---	---	---
16	185	162	173	181	177	179	231	221	225	---	---	---
17	163	157	159	185	181	182	228	191	207	219	209	213
18	167	159	163	192	186	190	255	217	246	223	212	216
19	172	150	164	194	182	188	247	238	243	224	214	219
20	167	159	164	195	187	192	239	237	238	228	218	222
21	158	112	130	198	192	194	239	237	238	226	78	214
22	125	115	121	198	152	184	240	237	238	248	76	197
23	127	115	121	197	159	188	242	239	240	236	201	221
24	154	128	143	198	167	186	244	240	242	200	192	195
25	155	145	149	205	197	200	245	242	243	194	135	171
26	159	152	156	208	204	206	247	212	242	210	152	192
27	165	160	163	208	204	206	223	189	211	194	171	181
28	171	158	167	209	206	208	211	186	194	174	171	172
29	176	160	171	213	196	207	211	188	200	186	173	178
30	180	173	176	213	210	212	227	172	212	176	157	164
31	---	---	---	219	209	214	228	178	209	---	---	---
MONTH	231	95	175	219	101	170	255	146	217	---	---	---

02423496 CAHABA RIVER NEAR HOOVER, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	10.2	9.2	9.7	10.6	10.1	10.3
2	---	---	---	---	---	---	9.3	8.3	8.9	10.7	10.2	10.5
3	---	---	---	---	---	---	8.8	7.5	8.3	11.8	10.4	11.0
4	---	---	---	---	---	---	8.9	7.6	8.3	10.6	9.6	10.4
5	---	---	---	---	---	---	8.3	7.1	7.8	9.6	9.2	9.4
6	---	---	---	---	---	---	8.3	6.9	7.5	10.6	9.2	9.9
7	---	---	---	---	---	---	9.0	7.6	8.3	12.1	9.9	11.0
8	---	---	---	---	---	---	9.7	7.8	8.8	12.1	11.5	11.9
9	---	---	---	---	---	---	9.4	8.0	9.0	11.4	10.4	10.8
10	---	---	---	---	---	---	8.4	7.0	7.9	10.5	10.3	10.4
11	---	---	---	---	---	---	8.3	7.3	7.9	10.8	10.3	10.5
12	---	---	---	---	---	---	7.3	6.5	6.9	12.4	10.8	11.4
13	---	---	---	---	---	---	6.7	5.3	6.1	12.3	11.7	12.0
14	---	---	---	---	---	---	7.7	5.0	6.3	11.7	11.3	11.5
15	---	---	---	---	---	---	8.2	7.4	7.8	11.6	11.1	11.4
16	---	---	---	---	---	---	7.9	6.3	7.0	11.1	10.3	10.8
17	---	---	---	---	---	---	6.1	4.5	5.2	10.3	9.2	9.9
18	---	---	---	---	---	---	5.1	3.7	4.4	9.4	8.8	9.1
19	---	---	---	---	---	---	5.1	3.6	4.4	9.7	9.0	9.4
20	---	---	---	---	---	---	7.0	5.1	6.1	10.2	9.5	9.8
21	---	---	---	---	---	---	8.9	7.1	8.0	9.5	8.5	9.0
22	---	---	---	---	---	---	11.0	8.9	9.9	8.9	7.8	8.4
23	---	---	---	13.6	13.0	13.3	13.1	10.8	12.0	8.8	7.2	8.1
24	---	---	---	13.0	12.2	12.7	13.8	10.8	12.1	9.1	8.0	8.6
25	---	---	---	13.5	12.1	12.8	12.1	10.3	11.1	9.5	8.1	8.8
26	---	---	---	16.3	13.2	14.1	10.1	8.7	9.6	9.8	8.6	9.2
27	---	---	---	16.6	13.7	14.7	11.0	9.6	10.3	10.7	9.7	10.1
28	---	---	---	14.2	12.4	13.5	11.9	10.4	11.4	10.2	8.4	9.4
29	---	---	---	12.3	11.3	11.9	10.1	8.3	8.9	10.7	8.8	9.8
30	---	---	---	11.2	10.3	10.8	9.4	8.7	9.0	11.8	10.4	11.1
31	---	---	---	---	---	---	10.4	9.4	9.8	11.3	10.0	10.7
MONTH	---	---	---	---	---	---	13.8	3.6	8.3	12.4	7.2	10.1
		FEBRUARY			MARCH			APRIL			MAY	
1	12.3	10.4	11.2	9.9	9.7	9.8	15.7	14.4	15.0	22.6	21.4	21.8
2	13.5	12.0	12.7	9.8	9.5	9.7	15.8	14.1	14.9	22.0	20.7	21.3
3	14.0	12.7	13.3	10.6	9.8	10.2	16.0	15.2	15.5	20.7	19.5	20.2
4	12.6	10.7	11.4	13.0	10.5	11.5	16.7	15.8	16.2	20.0	18.8	19.1
5	10.7	10.0	10.3	12.8	12.1	12.5	16.1	15.3	15.6	19.3	18.4	18.7
6	10.1	9.3	9.9	12.6	10.8	11.8	15.3	14.5	14.8	19.7	18.6	19.1
7	9.2	8.1	8.8	10.3	9.7	10.2	15.1	14.2	14.6	19.3	17.3	18.3
8	8.4	7.7	8.0	10.4	9.4	9.9	14.5	14.1	14.3	19.5	17.5	18.5
9	7.7	6.9	7.4	11.2	9.6	10.3	14.4	13.6	13.9	20.0	18.7	19.3
10	7.3	5.9	6.7	12.0	9.9	10.9	13.5	12.8	13.3	19.6	18.8	19.2
11	7.5	5.8	6.6	12.9	10.9	11.9	13.6	12.0	12.8	19.7	17.5	18.6
12	8.6	6.5	7.5	13.7	11.7	12.7	13.8	11.9	12.9	19.6	17.0	18.3
13	9.6	7.8	8.6	14.6	12.7	13.6	14.8	12.6	13.7	19.0	18.1	18.5
14	12.1	9.6	10.8	16.6	13.8	15.1	14.8	13.4	14.2	18.5	17.7	18.1
15	13.9	11.8	12.8	17.1	15.0	16.0	15.2	14.5	14.9	20.1	17.8	18.8
16	14.2	12.9	13.5	16.8	14.8	15.9	16.5	14.3	15.4	20.5	18.6	19.7
17	13.6	11.9	12.9	17.5	15.0	16.3	17.6	15.0	16.3	22.1	19.5	20.7
18	11.9	10.4	11.0	18.2	16.2	17.3	18.9	15.8	17.3	21.4	20.6	21.0
19	10.6	10.0	10.3	17.9	15.8	17.0	18.5	17.1	17.9	22.5	20.7	21.6
20	11.4	10.4	10.7	18.2	15.9	17.2	19.5	17.2	18.3	22.3	20.9	21.8
21	12.3	11.5	11.9	17.6	15.2	16.5	20.0	18.3	19.1	23.3	21.0	22.0
22	11.5	9.8	10.9	15.1	13.7	14.3	20.6	18.2	19.5	23.1	21.8	22.5
23	9.6	7.7	8.7	13.7	12.4	12.9	21.4	18.8	20.2	24.7	22.7	23.5
24	7.7	6.5	7.2	12.6	12.1	12.4	21.9	19.4	20.7	25.7	23.1	24.3
25	8.0	6.0	7.0	13.1	12.4	12.7	22.2	20.0	21.2	26.6	24.2	25.3
26	8.4	7.4	7.8	14.6	12.7	13.5	22.6	20.7	21.6	27.6	25.2	26.3
27	9.2	8.3	8.7	16.2	13.8	15.0	23.4	20.9	22.0	27.3	25.5	26.4
28	10.1	9.0	9.6	17.3	15.1	16.2	24.2	21.6	22.8	26.6	24.3	25.5
29	---	---	---	18.1	16.2	17.1	23.6	22.2	22.9	25.6	23.3	24.5
30	---	---	---	17.0	16.5	16.8	23.1	21.9	22.6	26.2	23.9	25.0
31	---	---	---	16.4	15.1	15.9	---	---	---	---	---	---
MONTH	14.2	5.8	9.9	18.2	9.4	13.6	24.2	11.9	17.1	---	---	---

02423496 CAHABA RIVER NEAR HOOVER, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	26.0	25.2	25.6	28.1	26.9	27.5	27.9	26.6	27.3
2	---	---	---	25.0	22.4	23.5	28.2	26.8	27.5	27.5	26.2	26.9
3	---	---	---	22.9	22.1	22.3	28.4	26.3	27.3	28.1	26.0	27.1
4	---	---	---	23.1	22.5	22.7	29.4	27.2	28.2	27.8	26.5	27.1
5	---	---	---	23.3	22.6	22.9	29.3	27.0	28.2	27.2	25.3	26.4
6	---	---	---	23.6	22.8	23.2	29.5	27.4	28.3	26.5	25.4	25.9
7	---	---	---	24.4	23.2	23.7	27.8	26.5	27.2	27.5	24.9	25.8
8	---	---	---	24.9	23.7	24.2	26.5	24.6	25.6	28.7	24.5	26.0
9	---	---	---	25.1	24.1	24.5	24.9	23.2	24.2	27.9	24.9	26.3
10	---	---	---	25.5	24.3	24.8	25.5	23.7	24.6	27.9	25.5	26.3
11	---	---	---	26.0	24.4	25.2	25.5	23.5	24.4	26.2	24.1	25.3
12	---	---	---	26.5	24.7	25.6	25.0	23.5	24.3	26.8	24.7	25.6
13	---	---	---	26.8	25.3	26.0	25.1	23.0	24.1	26.3	24.3	25.2
14	---	---	---	26.1	25.4	25.8	25.1	23.5	24.2	27.8	24.9	26.0
15	---	---	---	26.6	25.5	26.1	25.1	23.9	24.5	25.5	24.4	25.2
16	---	---	---	26.3	25.7	26.0	25.5	23.9	24.7	24.2	22.9	23.4
17	---	---	---	26.7	24.8	25.8	25.6	24.2	24.8	25.2	21.6	23.0
18	---	---	---	26.7	25.0	25.9	25.9	24.4	25.2	24.6	21.2	22.6
19	---	---	---	26.7	25.5	26.1	25.6	24.3	25.1	24.3	20.9	22.2
20	---	---	---	27.3	25.5	26.5	26.0	24.5	25.2	23.0	20.7	21.8
21	---	---	---	26.8	25.9	26.4	27.0	24.9	25.8	22.4	21.0	21.7
22	---	---	---	26.2	25.0	25.5	27.8	25.6	26.6	22.9	21.5	22.4
23	22.1	21.3	21.6	26.3	24.7	25.4	28.4	26.1	27.1	21.6	20.6	21.3
24	23.3	22.2	22.7	26.3	24.7	25.6	28.8	26.2	27.4	20.5	19.1	19.5
25	24.5	22.9	23.6	27.2	25.3	26.3	28.6	26.3	27.4	19.0	17.4	18.0
26	25.8	23.9	24.8	28.3	26.1	27.2	28.5	26.6	27.4	19.8	17.9	18.9
27	26.5	24.8	25.6	28.7	26.9	27.8	28.2	26.0	27.1	19.6	18.5	19.0
28	26.9	25.5	26.2	29.1	27.1	28.0	28.8	26.5	27.5	19.5	18.5	18.9
29	26.6	25.4	26.0	28.8	27.0	27.9	28.7	26.8	27.7	18.5	18.2	18.3
30	26.7	25.5	26.1	27.8	26.8	27.4	28.1	26.5	27.4	20.0	18.3	19.1
31	---	---	---	28.6	26.7	27.7	27.9	26.2	27.0	---	---	---
MONTH	---	---	---	29.1	22.1	25.5	29.5	23.0	26.2	28.7	17.4	23.4

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	9.9	9.5	9.8	10.4	10.2	10.3
2	---	---	---	---	---	---	10.0	9.7	9.9	10.5	10.4	10.4
3	---	---	---	---	---	---	10.1	9.8	10.0	10.4	10.2	10.3
4	---	---	---	---	---	---	10.0	9.7	9.9	10.9	10.1	10.2
5	---	---	---	---	---	---	10.1	9.7	9.9	10.3	10.1	10.2
6	---	---	---	---	---	---	10.0	9.7	9.8	10.2	9.9	10.1
7	---	---	---	---	---	---	9.7	9.4	9.6	9.9	9.4	9.7
8	---	---	---	---	---	---	9.5	9.1	9.3	9.4	9.3	9.3
9	---	---	---	---	---	---	9.4	9.0	9.2	9.6	9.3	9.5
10	---	---	---	---	---	---	9.4	9.1	9.2	9.9	9.6	9.8
11	---	---	---	---	---	---	9.4	8.9	9.1	10.1	9.8	10.0
12	---	---	---	---	---	---	9.6	8.9	9.3	9.9	9.2	9.6
13	---	---	---	---	---	---	9.8	9.1	9.5	10.3	9.2	9.7
14	---	---	---	---	---	---	10.0	9.4	9.7	9.7	9.4	9.6
15	---	---	---	---	---	---	10.3	9.1	9.7	9.5	9.3	9.4
16	---	---	---	---	---	---	10.5	9.7	10.1	9.6	9.2	9.5
17	---	---	---	---	---	---	10.8	9.9	10.4	9.9	9.7	9.8
18	---	---	---	---	---	---	11.4	10.4	10.9	10.1	9.9	10.0
19	---	---	---	---	---	---	11.8	10.6	11.1	10.3	9.8	10.0
20	---	---	---	---	---	---	12.0	10.9	11.4	10.4	9.6	10.1
21	---	---	---	---	---	---	11.7	10.8	11.3	10.7	9.4	9.7
22	---	---	---	---	---	---	11.6	10.3	11.0	10.0	10.0	10.0
23	---	---	---	9.4	9.2	9.3	10.8	8.7	9.5	10.0	10.0	10.0
24	---	---	---	9.4	9.2	9.3	9.6	9.0	9.3	10.3	9.6	10.0
25	---	---	---	9.3	8.9	9.2	10.1	9.2	9.7	10.2	9.3	9.8
26	---	---	---	8.9	8.5	8.8	10.8	9.7	10.2	10.0	9.2	9.7
27	---	---	---	9.0	8.0	8.7	10.8	9.8	10.2	10.1	9.3	9.7
28	---	---	---	9.3	8.9	9.1	9.9	9.4	9.6	10.3	9.6	9.9
29	---	---	---	9.5	9.3	9.4	11.3	9.6	10.3	9.8	9.3	9.6
30	---	---	---	9.7	9.5	9.6	10.6	10.1	10.3	9.5	8.9	9.3
31	---	---	---	---	---	---	10.4	9.8	10.1	9.7	8.9	9.3
MONTH	---	---	---	---	---	---	12.0	8.7	10.0	10.9	8.9	9.8

02423496 CAHABA RIVER NEAR HOOVER, AL--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9.8	9.3	9.5	10.7	10.5	10.6	8.5	8.2	8.3	6.9	5.7	6.2
2	9.6	8.6	9.2	10.7	10.5	10.6	8.6	8.2	8.4	8.1	6.9	7.5
3	9.4	8.0	8.8	10.6	10.3	10.5	8.1	7.8	8.0	7.6	6.3	7.2
4	9.6	8.9	9.2	10.3	9.1	10.0	7.8	7.4	7.7	6.3	6.0	6.1
5	9.6	9.3	9.4	11.2	9.3	10.8	8.1	7.7	7.9	6.5	5.9	6.2
6	9.8	9.1	9.4	11.5	11.2	11.4	8.4	8.1	8.2	7.0	6.5	6.7
7	10.1	9.7	10.0	11.7	11.5	11.6	8.6	8.2	8.4	7.4	6.8	7.0
8	10.2	10.1	10.2	11.8	11.6	11.7	8.5	8.4	8.4	7.4	6.7	7.0
9	10.3	10.1	10.2	12.0	11.6	11.7	9.0	8.5	8.8	6.8	6.5	6.7
10	10.4	10.1	10.2	11.9	11.6	11.7	9.2	8.9	9.0	7.0	6.4	6.7
11	10.5	10.2	10.3	11.8	11.0	11.6	9.5	9.1	9.3	7.5	6.8	7.1
12	10.4	10.1	10.2	11.7	10.3	11.1	9.5	9.0	9.3	7.4	6.8	7.0
13	10.2	9.9	10.0	10.4	9.7	10.2	9.4	9.0	9.2	7.2	6.5	6.8
14	10.3	9.6	9.9	10.0	9.2	9.6	9.2	8.8	9.0	7.2	6.5	6.9
15	10.2	9.5	9.8	9.6	9.0	9.3	8.9	8.6	8.8	7.9	6.7	7.2
16	10.1	8.7	9.5	9.9	9.0	9.3	9.2	8.6	8.9	8.3	6.8	7.4
17	9.8	8.4	9.0	10.1	8.9	9.3	9.0	8.5	8.7	8.0	6.7	7.3
18	10.0	9.6	9.8	10.2	8.6	9.3	8.8	7.9	8.4	7.5	6.4	6.9
19	10.2	9.8	10.0	11.2	8.5	9.6	8.8	7.7	8.1	7.5	6.0	6.7
20	10.2	9.8	10.0	10.5	7.9	9.2	9.2	7.6	8.3	6.7	5.7	6.2
21	10.2	9.7	10.0	8.4	7.2	7.9	9.5	7.5	8.3	6.9	6.3	6.6
22	10.3	10.1	10.2	8.9	8.5	8.8	9.9	7.3	8.3	6.6	6.0	6.3
23	10.5	10.2	10.4	9.2	8.8	9.0	9.8	7.2	8.3	6.1	5.7	5.9
24	10.6	10.3	10.4	9.3	9.2	9.2	10.0	7.1	8.3	6.0	5.5	5.7
25	10.7	10.3	10.5	9.3	9.0	9.2	9.5	6.9	7.9	5.8	5.1	5.4
26	10.5	10.2	10.4	9.3	8.7	9.0	8.9	6.8	7.6	5.5	4.7	5.1
27	11.2	10.0	10.5	9.0	8.3	8.7	8.3	6.7	7.3	5.5	4.5	5.0
28	10.7	10.3	10.5	8.8	7.9	8.4	7.8	6.4	7.0	5.7	4.7	5.1
29	---	---	---	8.6	7.4	8.0	7.1	6.2	6.5	5.9	5.0	5.4
30	---	---	---	7.9	7.6	7.8	7.1	5.9	6.5	6.0	5.1	5.5
31	---	---	---	8.2	7.8	8.1	---	---	---	5.8	5.0	5.5
MONTH	11.2	8.0	9.9	12.0	7.2	9.8	10.0	5.9	8.2	8.3	4.5	6.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.9	4.7	5.2	7.7	7.2	7.5	6.5	5.8	6.1	6.0	4.9	5.2
2	5.7	4.6	5.1	8.4	7.5	8.1	6.5	5.8	6.1	5.4	4.7	5.1
3	5.3	4.4	4.8	8.5	8.2	8.4	6.0	5.2	5.6	5.8	4.8	5.2
4	6.4	4.4	5.0	8.5	8.3	8.4	6.1	5.2	5.6	5.8	5.0	5.3
5	5.8	5.1	5.4	8.4	8.3	8.4	6.2	5.1	5.6	6.1	4.9	5.4
6	6.1	5.5	5.7	8.4	8.2	8.3	6.3	4.8	5.5	6.0	5.0	5.4
7	6.0	5.4	5.6	8.3	7.7	8.0	6.3	4.9	5.5	6.7	5.1	5.9
8	5.8	5.2	5.5	7.7	6.9	7.4	6.7	5.0	5.8	6.8	6.0	6.4
9	6.3	5.7	6.0	7.1	6.5	6.8	7.4	5.3	6.2	6.6	6.4	6.6
10	6.8	6.2	6.4	6.6	5.9	6.3	7.7	5.6	6.6	6.5	4.4	5.4
11	6.7	6.1	6.3	5.9	5.2	5.7	7.5	5.7	6.5	5.6	3.6	4.3
12	7.0	6.2	6.5	7.1	5.1	6.2	7.4	5.8	6.5	4.0	3.1	3.5
13	6.5	5.8	6.2	6.8	6.4	6.6	7.5	5.9	6.6	4.0	2.9	3.4
14	7.4	5.3	5.9	6.6	6.4	6.5	7.2	6.0	6.5	3.8	2.8	3.5
15	7.4	6.3	6.8	6.7	6.3	6.4	6.5	5.7	6.1	3.8	3.4	3.6
16	7.5	7.3	7.4	6.4	6.1	6.3	6.4	5.1	5.8	5.5	3.7	4.6
17	7.7	7.4	7.6	6.6	6.1	6.3	5.6	4.7	5.2	6.3	5.5	5.8
18	7.6	7.2	7.4	6.6	5.9	6.2	7.0	5.6	6.4	6.8	5.9	6.2
19	7.5	7.1	7.3	6.1	5.7	5.9	6.9	5.5	6.2	6.9	6.2	6.6
20	7.7	7.4	7.6	6.3	5.7	6.0	6.9	5.6	6.2	8.0	6.4	7.1
21	7.9	7.3	7.7	6.7	5.8	6.2	6.8	5.6	6.1	7.5	6.0	6.8
22	8.0	7.9	7.9	6.6	6.1	6.3	6.9	5.2	5.8	7.8	7.0	7.4
23	8.1	7.8	7.9	6.9	6.1	6.4	6.8	5.0	5.7	7.8	7.3	7.6
24	7.9	7.8	7.8	6.8	6.1	6.4	6.7	4.8	5.5	7.4	7.1	7.3
25	7.8	7.5	7.7	6.7	6.2	6.4	6.3	4.7	5.4	8.3	7.2	7.7
26	7.6	7.4	7.5	6.6	6.0	6.2	6.0	4.5	5.2	8.1	7.7	7.9
27	7.5	7.2	7.4	6.3	5.8	6.0	4.9	3.9	4.4	8.3	7.7	8.1
28	7.5	6.7	7.3	6.2	5.7	5.9	4.5	3.3	3.8	7.7	7.1	7.4
29	7.5	7.0	7.2	6.1	4.8	5.5	5.3	3.8	4.4	7.3	6.9	7.1
30	7.5	7.0	7.3	5.9	5.3	5.6	5.7	4.4	4.8	7.2	6.8	7.0
31	---	---	---	6.8	5.6	6.2	5.6	5.2	5.4	---	---	---
MONTH	8.1	4.4	6.6	8.5	4.8	6.7	7.7	3.3	5.7	8.3	2.8	6.0

02423500 CAHABA RIVER NEAR ACTON, AL

LOCATION.--Lat 33°21'48", long 86°48'47", in SE¼ sec. 23, T. 19 S., R. 3 W., Jefferson County, Hydrologic Unit 03150202 on right bank at downstream side of highway bridge (Bains Bridge), 0.5 mi upstream from Patton Creek, 1 mi downstream from U.S. Highway 31, 1 mi northwest of Acton, 16 mi south of Birmingham, and at mile 136.8.

DRAINAGE AREA.--230 mi^2.

PERIOD OF RECORD.--October 1938 to September 1957, October 1983 to current year.

REVISED RECORDS.--WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 375.00 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 25, 1939, wire-weight gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. An average of 82 ft^3/s is diverted above station by Birmingham Water Works Board, and is not included in record except about 7 ft^3/s which is returned to river above station. Flow partly regulated by Purdy Lake (capacity 15,300 acre-ft) on Little Cahaba River. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--25 years (water years 1939-57, 1984-89), 312 ft^3/s, 18.42 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,500 ft^3/s, Dec. 28, 1942, gage height, 43.70 ft; maximum gage height, 44.25 ft, Dec. 29, 1942; minimum discharge, no flow for several days each year 1953-56.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of Apr. 13, 1979, reached a stage of 42.8 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	1200	*9,220	*25.81	July 3	0200	6,130	19.59
June 21	1545	5,740	18.74				

Minimum discharge, 12 ft^3/s, Oct. 13, 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	26	264	1610	164	2070	941	78	27	373	56	57
2	505	24	186	853	137	1090	662	197	27	3810	64	40
3	300	24	141	649	122	750	601	111	28	4820	84	29
4	167	89	109	773	121	2070	1040	84	59	2560	61	24
5	92	429	87	558	141	8810	3210	271	102	2320	37	22
6	48	264	66	444	241	4450	1730	435	85	2090	30	21
7	34	114	51	425	652	1840	1100	287	69	1420	34	20
8	28	62	43	368	709	1070	846	177	71	943	32	19
9	26	45	41	404	500	793	1370	126	96	801	31	18
10	24	35	35	734	378	606	996	145	84	734	26	21
11	21	31	32	1020	312	499	723	161	91	567	23	55
12	18	29	27	1620	264	426	567	97	92	456	22	33
13	17	77	25	3730	220	366	461	67	51	407	21	57
14	16	58	30	2710	185	314	388	105	52	312	22	24
15	16	52	27	1900	162	283	451	126	837	252	30	24
16	16	38	27	1270	141	240	403	90	1630	196	35	21
17	17	32	25	849	118	193	326	60	624	171	25	19
18	22	27	27	646	123	171	263	44	344	138	101	18
19	35	27	23	601	142	151	225	33	427	142	26	18
20	21	1810	22	447	155	146	222	131	992	203	22	17
21	42	1340	21	268	586	1180	186	159	4170	155	21	65
22	26	506	22	230	634	1250	154	95	3330	166	20	417
23	22	308	176	212	442	1310	128	77	2130	157	20	186
24	25	208	241	190	328	1490	107	60	1040	210	19	53
25	21	151	163	166	264	968	88	41	634	141	19	164
26	20	130	109	146	234	693	76	32	429	101	34	426
27	20	710	79	142	230	540	68	30	298	76	40	191
28	20	795	85	128	2700	436	58	27	242	60	22	70
29	46	558	78	107	---	530	51	26	223	45	20	77
30	25	367	95	209	---	2760	41	24	183	38	56	113
31	26	---	1000	210	---	1670	---	25	---	119	126	---
TOTAL	1865	8366	3357	23619	10405	39165	17482	3421	18467	23983	1179	2319
MEAN	60.2	279	108	762	372	1263	583	110	616	774	38.0	77.3
MAX	505	1810	1000	3730	2700	8810	3210	435	4170	4820	126	426
MIN	16	24	21	107	118	146	41	24	27	38	19	17
CFSM	.26	1.21	.47	3.31	1.62	5.49	2.53	.48	2.68	3.36	.17	.34
IN.	.30	1.35	.54	3.82	1.68	6.33	2.83	.55	2.99	3.88	.19	.38

CAL YR 1988 TOTAL 50969 MEAN 139 MAX 2620 MIN 12 CFSM .61 IN. 8.24
WTR YR 1989 TOTAL 153628 MEAN 421 MAX 8810 MIN 16 CFSM 1.83 IN. 24.85

02424000 CAHABA RIVER AT CENTREVILLE, AL

LOCATION.--Lat 32°56'42", long 87°08'21", in SE¼ sec. 26, T. 23 N., R. 9 E., Bibb County, Hydrologic Unit 03150202, on left bank 60 ft downstream from U.S. Highway 82 bridge, 0.2 mi west of Centreville, 0.5 mi upstream from Gulf, Mobile & Ohio Railroad bridge, 2.5 mi upstream from Sandy Creek, and at mile 81.2.

DRAINAGE AREA.--1,027 mi^2.

PERIOD OF RECORD.--August 1901 to February 1908, May 1929 to March 1932, May 1935 to current year. Gage height records collected at same site from January 1917 to December 1971 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 682: 1901-08. WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 180.74 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 31, 1939, nonrecording gage at same site. Prior to May 1929, at datum 1.15 ft lower.

REMARKS.--Estimated daily discharges: April 9-19. Records good. An average of 82 ft^3/s is diverted upstream from station by Birmingham Water Works Board, and is not included in records. Flow partly regulated by Purdy Lake (capacity, 15,300 acre-ft) on Little Cahaba River and several waste-water treatment plants. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report. Satellite telemeter at station.

AVERAGE DISCHARGE.--62 years (water years 1902-07, 1930-31, 1936-89), 1,594 ft^3/s, 21.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 83,600 ft^3/s, Mar. 29, 1951; maximum gage height, 36.63 ft, Apr. 8, 1938; minimum, 90 ft^3/s, Oct. 24-29, 1904, gage height, -0.35 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 6	0600	*21,800	*24.68				

Minimum discharge, 177 ft^3/s, Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	397	289	1460	7730	1220	6600	4320	785	376	1780	1020	644
2	1010	262	1220	4850	1050	4070	3100	1090	363	10300	826	563
3	1560	242	1030	3180	966	3120	2550	930	356	15900	712	517
4	955	291	887	3010	929	3460	3030	804	433	9140	822	457
5	627	900	805	2530	932	20600	9420	849	708	7090	727	400
6	473	1620	719	2070	1040	18900	7190	1460	1140	6900	638	350
7	368	918	657	1800	2110	8270	4390	1360	1040	7040	615	332
8	306	647	597	1650	2880	4900	3400	998	699	4100	585	324
9	267	556	557	1570	2230	3580	5000	837	728	3730	560	315
10	251	514	523	2100	1790	2840	8400	967	904	3040	510	308
11	244	620	507	2750	1560	2380	7000	1080	715	2470	473	766
12	238	594	506	3080	1430	2080	3000	865	1100	2140	453	938
13	222	1300	479	8580	1290	1840	2300	723	949	2420	449	654
14	205	1140	449	8590	1180	1640	2000	694	789	2340	443	583
15	198	813	434	5760	1070	1480	1800	1360	2330	1860	463	453
16	192	674	439	4490	984	1340	1600	1210	5390	1570	507	381
17	185	649	428	3290	905	1220	1500	891	3360	1310	647	368
18	184	604	416	2580	876	1140	1450	735	1810	1150	621	355
19	190	508	402	2190	896	1060	1400	671	2860	1020	528	330
20	200	4390	384	2020	966	1020	1290	628	7530	1120	487	303
21	343	6040	368	1720	1940	1940	1220	834	5760	1180	461	295
22	315	2740	368	1430	2950	4850	1140	962	9730	1120	409	298
23	337	1650	961	1320	2090	3890	1050	917	6480	2340	382	997
24	297	1270	2270	1210	1660	4430	966	906	4380	1910	362	694
25	240	1050	1770	1120	1430	3610	891	704	2970	1720	351	544
26	222	909	1360	1040	1310	2750	829	584	2100	1330	345	1000
27	213	2390	1070	995	1260	2260	780	516	1570	2200	429	1210
28	204	3530	957	949	3560	1900	745	473	1270	1440	561	750
29	199	2570	936	896	---	1860	699	438	1320	1210	412	659
30	213	1860	976	919	---	10600	654	414	1380	995	369	836
31	335	---	4080	1470	---	7600	---	400	---	1080	441	---
TOTAL	11190	41540	28015	86889	42504	137230	83114	26085	70540	102945	16608	16624
MEAN	361	1385	904	2803	1518	4427	2770	841	2351	3321	536	554
MAX	1560	6040	4080	8590	3560	20600	9420	1460	9730	15900	1020	1210
MIN	184	242	368	896	876	1020	654	400	356	995	345	295
CFSM	.35	1.35	.88	2.73	1.48	4.31	2.70	.82	2.29	3.23	.52	.54
IN.	.41	1.50	1.01	3.15	1.54	4.97	3.01	.94	2.56	3.73	.60	.60

CAL YR 1988 TOTAL 261664 MEAN 715 MAX 10900 MIN 135 CFSM .70 IN. 9.48
WTR YR 1989 TOTAL 663284 MEAN 1817 MAX 20600 MIN 184 CFSM 1.77 IN. 24.03

02424000 CAHABA RIVER AT CENTREVILLE, AL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.10	1.63	4.45	13.04	3.96	11.97	9.03	3.01	1.92	5.02	3.54	2.66
2	3.86	1.54	3.96	9.86	3.61	8.64	7.19	3.69	1.88	13.35	3.11	2.45
3	4.63	1.46	3.56	7.27	3.43	7.18	6.33	3.35	1.86	21.71	2.84	2.32
4	3.40	1.61	3.25	7.03	3.34	7.16	6.91	3.06	2.09	16.21	3.10	2.15
5	2.63	3.20	3.06	6.28	3.35	22.45	13.96	3.17	2.81	12.65	2.88	1.97
6	2.21	4.73	2.86	5.54	3.58	23.66	13.11	4.42	3.80	11.74	2.66	1.82
7	1.89	3.31	2.70	5.07	5.46	15.49	9.07	4.24	3.59	13.15	2.60	1.76
8	1.69	2.68	2.55	4.80	6.82	9.78	7.58	3.49	2.81	8.67	2.52	1.73
9	1.55	2.44	2.44	4.65	5.80	7.83	---	3.14	2.88	8.07	2.45	1.70
10	1.50	2.32	2.35	5.58	5.05	6.77	---	3.42	3.29	7.15	2.32	1.68
11	1.47	2.61	2.30	6.63	4.64	6.05	---	3.67	2.85	6.19	2.21	2.92
12	1.45	2.54	2.30	7.11	4.38	5.55	---	3.20	3.72	5.67	2.15	3.36
13	1.39	4.11	2.23	12.97	4.12	5.15	---	2.87	3.38	6.11	2.14	2.69
14	1.32	3.80	2.14	14.55	3.88	4.78	---	2.80	3.02	5.98	2.12	2.50
15	1.29	3.08	2.10	10.87	3.65	4.47	---	4.24	5.65	5.17	2.18	2.12
16	1.27	2.75	2.11	9.18	3.46	4.21	---	3.94	9.99	4.65	2.30	1.91
17	1.24	2.68	2.08	7.42	3.29	3.97	---	3.26	7.71	4.16	2.66	1.86
18	1.24	2.56	2.04	6.37	3.23	3.80	---	2.89	5.08	3.82	2.60	1.82
19	1.26	2.31	2.00	5.74	3.27	3.63	---	2.74	6.15	3.55	2.36	1.74
20	1.30	7.83	1.95	5.45	3.43	3.54	4.12	2.63	12.99	3.75	2.25	1.65
21	1.81	11.40	1.89	4.92	5.12	5.13	3.98	3.11	10.41	3.88	2.18	1.62
22	1.72	6.79	1.89	4.38	6.92	9.46	3.81	3.41	15.12	3.75	2.02	1.64
23	1.79	4.80	3.31	4.16	5.57	8.25	3.61	3.31	12.12	5.99	1.94	3.47
24	1.66	4.08	5.87	3.96	4.82	8.95	3.43	3.29	9.05	5.27	1.87	2.79
25	1.46	3.62	5.02	3.77	4.38	7.87	3.26	2.82	7.04	4.93	1.83	2.39
26	1.39	3.30	4.24	3.59	4.15	6.64	3.12	2.52	5.59	4.19	1.81	3.47
27	1.36	5.78	3.64	3.49	4.05	5.85	3.00	2.33	4.66	5.72	2.06	3.95
28	1.32	7.76	3.41	3.39	7.10	5.25	2.92	2.21	4.07	4.40	2.44	2.93
29	1.30	6.34	3.36	3.27	---	5.16	2.81	2.11	4.15	3.94	2.02	2.71
30	1.35	5.17	3.45	3.32	---	14.78	2.70	2.04	4.29	3.49	1.89	3.12
31	1.79	---	7.88	4.47	---	13.86	---	1.99	---	3.68	2.11	---
MEAN	1.79	3.94	3.11	6.39	4.42	8.30	---	3.11	5.47	6.97	2.36	2.36
MAX	4.63	11.40	7.88	14.55	7.10	23.66	---	4.42	15.12	21.71	3.54	3.95
MIN	1.24	1.46	1.89	3.27	3.23	3.54	---	1.99	1.86	3.49	1.81	1.62

CAL YR 1988 MEAN 2.72 MAX 16.88 MIN 1.07

02424590 CAHABA RIVER NEAR SUTTLE, AL

LOCATION.--Lat 32°31'45", long 87°11'56", in NW¼ sec. 20, T. 18 N., R. 9 E., Perry County, Hydrologic Unit 03150202, at bridge on county road 6, 1.2 mi west of Suttle, 11 mi southeast of Marion, and 31.0 mi upstream from mouth.

DRAINAGE AREA.--1,480 mi^2.

PERIOD OF RECORD.--October 1987 to current year. Periodic gage heights during high-water periods since 1949 have been collected by National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 97.64 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records good. For diversion above station see REMARKS for station at Centreville. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,500 ft^3/s, Mar. 8, 1989, gage height, 29.22 ft; minimum, 271 ft^3/s, Aug. 20, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 30, 1951 reached a stage of 42.8 ft, flood of Feb. 25, 1961 reached a stage of 44.0 ft, and flood of Apr. 15, 1979 reached a stage of 41.55 ft (discharges not determined) from information furnished by National Weather Service.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 16,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 8	0600	*20,500	*29.22	July 5	0600	20,100	28.85

Minimum discharge, 376 ft^3/s, Oct. 19, 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	750	502	2350	6610	2050	4800	11500	1240	637	3230	2130	641
2	1480	526	1920	8750	1740	6920	7020	1380	614	7250	1800	787
3	1830	482	1610	6490	1550	5040	4340	1680	594	14800	1520	764
4	1920	481	1400	4190	1470	4030	3780	1480	742	18500	1360	726
5	1260	586	1230	3790	1430	6410	5530	1390	739	19700	1330	657
6	926	1280	1140	3180	1430	12800	9340	1450	1130	16600	1200	607
7	756	1840	1050	2760	2060	17800	9490	2070	1680	12300	1090	557
8	639	1190	989	2480	3400	19800	5850	1880	1440	10400	1040	533
9	570	951	937	2300	3510	13600	5620	1470	1120	7140	979	521
10	516	848	893	2290	2800	5810	7820	1300	1050	6430	927	517
11	486	769	863	2900	2370	4110	8530	1420	1180	5360	867	579
12	464	815	845	3360	2130	3500	6450	1510	1310	4240	815	964
13	448	1330	826	4540	1940	3110	4720	1250	1700	3820	783	1260
14	433	1960	794	8260	1780	2850	3920	1120	1400	4490	763	944
15	415	1520	763	9830	1640	2630	3490	1280	1560	4130	753	800
16	403	1180	784	7460	1500	2440	3370	1980	4110	3340	759	691
17	400	1170	780	5380	1390	2270	3250	1710	5970	2890	835	607
18	388	1030	749	4110	1310	2110	2940	1290	3930	2640	878	568
19	379	946	720	3410	1290	1970	2720	1120	3310	2370	928	553
20	382	1340	702	3130	1330	1840	2520	1030	6170	2150	788	527
21	459	5340	684	2920	1680	2350	2350	1020	9090	2150	766	499
22	607	6550	665	2570	3100	4500	2210	1150	8160	2130	720	484
23	608	3520	790	2260	3410	6490	2070	1360	10800	2150	681	482
24	564	2280	2140	2070	2570	5640	1910	1450	10500	3490	644	973
25	536	1790	3260	1900	2140	5510	1770	1460	7070	3210	618	909
26	472	1500	2480	1760	1880	4500	1640	1100	4490	2800	594	814
27	443	1510	1860	1640	1750	3660	1520	910	3180	2450	603	1230
28	431	3340	1500	1560	1850	3130	1420	810	2530	2890	630	1480
29	425	4020	1400	1470	---	2860	1350	742	2270	2280	758	1130
30	415	3010	1340	1500	---	6260	1280	696	2360	2040	658	1040
31	406	---	2780	1640	---	10300	---	664	---	1890	607	---
TOTAL	20211	53606	40244	116510	56500	179040	129720	40412	100836	179260	28824	22844
MEAN	652	1787	1298	3758	2018	5775	4324	1304	3361	5783	930	761
MAX	1920	6550	3260	9830	3510	19800	11500	2070	10800	19700	2130	1480
MIN	379	481	665	1470	1290	1840	1280	664	594	1890	594	482
CFSM	.44	1.21	.88	2.54	1.36	3.90	2.92	.88	2.27	3.91	.63	.51
IN.	.51	1.35	1.01	2.93	1.42	4.50	3.26	1.02	2.53	4.51	.72	.57

CAL YR 1988 TOTAL 421296 MEAN 1151 MAX 12300 MIN 277 CFSM .78 IN. 10.59
WTR YR 1989 TOTAL 968007 MEAN 2652 MAX 19800 MIN 379 CFSM 1.79 IN. 24.33

02425000 CAHABA RIVER NEAR MARION JUNCTION, AL

LOCATION.--Lat 32°26'38", long 87°10'49", in SE¼SW¼ sec. 16, T. 17 N., R. 9 E., Dallas County, Hydrologic Unit 03150203, on right bank 10 ft downstream from bridge on U.S. Highway 80, 3.8 mi downstream from Oakmulgee Creek, 3.5 mi east of Marion Junction, and 21.4 mi upstream from mouth.

DRAINAGE AREA.--1,766 mi².

PERIOD OF RECORD.--October 1938 to September 1954, October 1968 to current year. Monthly discharge only October to December 1938, published in WSP 1304. Gage-height records collected at same site from 1939 to 1971 are contained in reports of the National Weather Service.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 86.72 ft above National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers). October 1940 to September 1954, nonrecording gage 12 mi downstream from base gage at same datum.

REMARKS.--No estimated daily discharges. Records good. For diversion above station see Remarks for station at Centreville. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--37 years (water years 1939-54, 1969-89), 2,835 ft³/s, 21.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 83,400 ft³/s, Aug. 16, 1939, gage height, 42.95 ft; minimum observed, 224 ft³/s, Sept. 16, 1954, gage height, 0.80 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 24, 1961, reached a stage of 43.80 ft, present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 8	1700	20,200	27.86
June 24	0900	14,800	22.54
July 5	1500	*20,300	*28.02

Minimum discharge, 450 ft³/s, Oct. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	809	561	2490	7120	2170	4400	12500	1270	728	3260	2030	710
2	1920	637	2000	9680	1970	7690	9560	1330	703	6060	1860	841
3	2060	597	1720	8390	1760	6140	5200	1630	682	12200	1590	871
4	2290	608	1530	5190	1690	4650	4420	1530	770	18400	1450	836
5	1600	747	1360	4350	1650	6510	7050	1420	832	20100	1390	760
6	1150	1200	1260	3640	1650	13000	9480	1440	993	18800	1290	707
7	923	2010	1180	3040	2140	16900	11200	1820	1620	15100	1180	650
8	785	1440	1110	2670	3430	19800	7910	1900	1560	12600	1120	618
9	700	1130	1070	2430	3970	17200	6930	1530	1280	8860	1070	600
10	635	1010	1030	2360	3160	8320	8930	1350	1160	7170	1020	592
11	593	928	993	2950	2580	4660	10500	1360	1270	6120	957	628
12	564	949	985	3640	2330	3860	8890	1560	1340	4720	900	897
13	541	1560	964	4650	2150	3360	6280	1350	1650	4090	865	1350
14	523	2130	933	8280	2010	2990	4780	1200	1590	4880	843	1110
15	501	1910	899	10600	1900	2720	4010	1290	1550	4640	835	909
16	483	1590	942	8920	1780	2550	3710	1780	3500	3670	848	819
17	477	1530	945	6300	1680	2390	3570	1820	6270	3020	936	718
18	467	1380	912	4640	1600	2220	3080	1430	5020	2630	937	666
19	454	1300	878	3720	1580	2090	2710	1230	3760	2290	1060	647
20	459	1820	844	3380	1610	1980	2440	1140	7100	2060	876	618
21	557	4920	822	3070	1970	2390	2240	1110	10500	2020	862	588
22	718	7280	803	2640	3060	4690	2100	1160	11100	2070	800	569
23	769	4420	841	2280	3890	7480	1970	1420	13300	1950	769	561
24	714	2550	1930	2090	2880	7110	1840	1490	14500	3440	727	927
25	665	1960	3490	1950	2410	6530	1720	1570	12000	3380	700	1060
26	586	1670	2810	1840	2140	5520	1620	1270	8110	3070	672	961
27	542	1630	2180	1760	2010	4380	1520	1050	4500	2450	667	1190
28	521	3070	1740	1690	2240	3640	1430	930	2860	2980	683	1600
29	518	4420	1590	1630	---	3200	1360	852	2440	2270	808	1300
30	502	3380	1550	1700	---	6530	1290	799	2330	2020	756	1180
31	488	---	3770	1820	---	10200	---	761	---	1850	712	---
TOTAL	24514	60337	45571	128420	63410	195100	150240	41792	125018	188170	31213	25483
MEAN	791	2011	1470	4143	2265	6294	5008	1348	4167	6070	1007	849
MAX	2290	7280	3770	10600	3970	19800	12500	1900	14500	20100	2030	1600
MIN	454	561	803	1630	1580	1980	1290	761	682	1850	667	561
CFSM	.45	1.14	.83	2.35	1.28	3.56	2.84	.76	2.36	3.44	.57	.48
IN.	.52	1.27	.96	2.71	1.34	4.11	3.16	.88	2.63	3.96	.66	.54

CAL YR 1988 TOTAL 482439 MEAN 1318 MAX 14300 MIN 288 CFSM .75 IN. 10.16
WTR YR 1989 TOTAL 1079268 MEAN 2957 MAX 20100 MIN 454 CFSM 1.67 IN. 22.73

MOBILE RIVER MAIN STEM

02427506 ALABAMA RIVER AT MILLERS FERRY LOCK AND DAM, NEAR CAMDEN, AL

LOCATION.--Lat 32°06'00", long 87°23'52", in SW¼NW¼ sec. 17, T. 13 N., R. 7 E., Wilcox County, Hydrologic Unit 03150203, at downstream end of Millers Ferry Lock and Dam, 1.0 mi downstream from State Highway 28, 1.3 mi downstream from Prairie Creek, 6.6 mi upstream from Dixon Creek, 12 mi northwest of Camden, and at mile 142.25.

DRAINAGE AREA.--20,637 mi².

PERIOD OF RECORD.--November 1968 to current year (gage height only). October 1971 to current year in reports of Geological Survey. November 1968 to September 1971 in files of U.S. Army Corps of Engineers.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 19.00 ft above National Geodetic Vertical Datum of 1929.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 62.3 ft, Apr. 20, 1979; minimum, 10.5 ft, Sept. 2, 3, 4, 1969.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 55.6 ft, June 26; minimum 13.7 ft, June 5.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.00	14.00	25.20	37.10	22.70	24.90	38.80	14.90	13.90	31.40	16.80	16.90
2	21.60	17.60	23.00	40.80	20.30	31.00	35.30	18.80	14.00	29.20	17.30	14.60
3	22.20	18.20	22.80	40.90	16.50	37.70	29.20	18.80	14.00	31.00	19.40	14.60
4	20.70	15.20	22.00	37.70	17.10	38.60	25.50	21.20	14.00	36.30	22.00	14.80
5	18.70	22.10	18.60	31.90	17.50	34.00	33.20	21.40	13.70	40.50	20.30	14.60
6	20.60	23.10	18.60	27.70	17.80	37.40	40.20	21.50	14.10	41.20	20.30	14.90
7	17.10	17.70	18.60	26.00	23.30	43.60	45.80	22.10	14.30	42.40	15.00	14.60
8	17.20	20.40	18.60	24.00	24.70	43.80	43.90	17.60	18.30	41.90	15.10	14.50
9	17.20	16.10	18.60	23.10	25.10	44.50	44.10	20.70	18.70	41.40	15.20	14.10
10	19.90	18.50	20.00	22.70	25.20	42.70	44.80	21.20	17.70	39.10	15.40	14.20
11	14.40	19.30	16.70	22.60	25.10	38.70	47.80	21.20	14.50	36.30	14.80	14.60
12	18.20	15.60	19.70	22.60	22.80	35.20	46.10	21.40	14.70	30.60	14.70	14.00
13	18.50	15.70	19.60	28.80	18.60	32.30	45.10	19.40	15.00	27.80	14.30	14.40
14	18.50	18.90	20.20	29.40	19.10	31.60	42.00	15.30	18.80	27.90	14.20	14.40
15	14.40	15.60	20.20	32.10	19.20	25.90	36.20	14.70	19.90	25.80	14.20	14.40
16	14.30	18.20	19.10	36.60	19.60	27.40	30.00	19.00	21.90	28.10	14.40	15.00
17	14.30	20.10	17.90	36.80	19.10	27.40	24.60	14.60	31.90	25.90	17.20	14.50
18	14.80	22.60	18.50	32.20	16.50	24.10	20.80	14.70	39.50	26.50	17.20	14.60
19	14.30	17.10	19.60	29.90	16.10	21.00	21.70	14.70	41.10	26.00	14.90	14.20
20	14.20	19.10	19.20	27.40	16.10	19.40	24.30	15.20	44.40	22.70	15.00	14.00
21	14.50	27.30	19.20	27.20	22.20	22.80	20.40	15.20	47.00	22.60	14.00	13.90
22	18.70	29.30	19.00	27.20	24.80	23.50	18.60	14.80	49.00	24.50	14.10	13.80
23	17.10	26.10	15.40	22.40	31.60	33.30	14.20	14.30	50.70	26.10	14.00	14.40
24	18.50	24.90	18.30	19.90	30.00	36.50	18.00	15.00	54.00	26.10	14.40	14.90
25	18.40	19.70	14.80	19.70	27.60	37.60	15.00	17.30	55.50	30.50	14.90	16.10
26	17.50	22.30	19.20	19.20	25.20	36.60	14.70	20.80	55.60	31.00	14.80	19.50
27	17.80	17.90	19.10	18.00	19.70	35.00	15.20	14.70	53.70	30.20	14.20	19.40
28	14.90	23.10	19.40	20.50	21.00	31.10	15.00	14.60	48.00	25.50	15.20	21.80
29	14.70	31.10	19.40	18.80	---	23.80	15.00	14.30	39.50	25.60	14.70	22.00
30	14.30	27.70	19.70	18.70	---	30.10	14.80	14.30	35.00	19.00	14.60	22.20
31	14.00	---	23.00	16.00	---	38.40	---	14.00	---	18.10	16.70	---
MEAN	16.98	20.48	19.46	27.03	21.59	32.58	29.34	17.35	30.08	30.04	15.78	15.66
MAX	22.20	31.10	25.20	40.90	31.60	44.50	47.80	22.10	55.60	42.40	22.00	22.20
MIN	14.00	14.00	14.80	16.00	16.10	19.40	14.20	14.00	13.70	18.10	14.00	13.80

CAL YR 1988 MEAN 17.95 MAX 43.20 MIN 13.40
WTR YR 1989 MEAN 23.03 MAX 55.60 MIN 13.70

02427700 TURKEY CREEK AT KIMBROUGH, AL

LOCATION.--Lat 32°01'15", long 87°33'30", in SE¼SE¼ sec. 10, T. 12 N., R. 5 E., Wilcox County, Hydrologic Unit 03150203, on right bank on upstream side of bridge on county road, 0.3 mi upstream from Southern Railway bridge, 0.6 mi downstream from State Highway 5, 1 mi south of Kimbrough, 2 mi upstream from mouth, and 6 mi upstream from Alabama River.

DRAINAGE AREA.--97.5 mi².

PERIOD OF RECORD.--August 1958 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 58.78 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Mar. 9, Apr. 7, 10-13, June 20-28. Records good except those for periods estimated due to backwater from Alabama River, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--31 years, 135 ft³/s, 18.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft³/s, Dec. 10, 1961, gage height, 25.02 ft; no flow Sept. 25, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 31	2100	2,420	9.57
Mar. 30	1000	2,240	8.58
Apr. 5	1300	*2,750	11.37
Apr. 10	0200	2,350	9.16
June 26	1000	(a)	*12.29

(a) Backwater from Alabama River

Minimum daily discharge, 4.2 ft³/s, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	18	68	1390	118	184	239	448	16	110	87	8.6
2	288	18	58	333	93	393	180	217	15	328	53	7.5
3	138	17	52	219	82	818	150	100	17	603	41	6.7
4	77	23	49	163	77	294	275	77	41	155	32	6.0
5	41	152	46	129	82	244	2410	94	64	172	26	5.9
6	28	72	43	115	87	577	783	71	124	108	22	4.9
7	22	38	42	104	84	239	e250	57	44	83	19	4.9
8	19	29	42	91	83	186	471	50	37	103	17	4.9
9	17	45	39	81	70	e150	1730	38	191	59	15	5.1
10	16	43	39	94	63	114	e1500	37	59	48	14	5.2
11	16	47	54	92	62	100	e500	34	74	38	13	14
12	15	49	71	95	61	90	e350	32	223	33	13	18
13	13	183	54	129	59	81	e250	31	52	29	12	12
14	11	133	46	206	59	74	181	31	49	85	12	8.3
15	10	77	42	684	58	67	154	32	176	130	12	6.6
16	10	81	67	259	55	67	132	32	354	120	13	5.9
17	10	195	69	172	54	61	111	28	131	68	55	5.5
18	11	104	53	138	54	57	96	25	81	123	28	6.2
19	11	73	45	123	66	53	87	28	65	235	19	5.2
20	12	444	42	157	66	50	81	45	e130	153	15	4.4
21	241	186	41	134	125	194	74	108	e55	91	12	4.3
22	117	106	41	103	115	634	74	56	e40	154	11	4.2
23	45	80	43	91	72	976	68	48	e30	113	10	4.3
24	33	67	73	82	57	521	61	212	e25	240	9.7	4.7
25	28	59	68	75	53	270	55	76	e22	454	9.0	5.3
26	23	54	51	70	53	202	51	46	e20	151	8.2	7.3
27	20	401	44	100	54	162	45	33	e35	90	7.5	9.4
28	19	188	47	90	133	133	117	31	e30	70	6.9	9.1
29	18	107	52	74	---	223	251	26	73	55	6.9	15
30	18	82	59	132	---	1770	94	21	324	46	8.2	17
31	17	---	1400	186	---	437	---	18	---	58	10	---
TOTAL	1482	3171	2940	5911	2095	9421	10820	2182	2597	4305	617.4	226.4
MEAN	47.8	106	94.8	191	74.8	304	361	70.4	86.6	139	19.9	7.55
MAX	288	444	1400	1390	133	1770	2410	448	354	603	87	18
MIN	10	17	39	70	53	50	45	18	15	29	6.9	4.2
CFSM	.49	1.08	.97	1.96	.77	3.12	3.70	.72	.89	1.42	.20	.08
IN.	.57	1.21	1.12	2.26	.80	3.59	4.13	.83	.99	1.64	.24	.09

CAL YR 1988 TOTAL 27811.37 MEAN 76.0 MAX 1400 MIN .92 CFSM .78 IN. 10.61
WTR YR 1989 TOTAL 45767.8 MEAN 125 MAX 2410 MIN 4.2 CFSM 1.29 IN. 17.46

e Estimated

02428400 ALABAMA RIVER AT CLAIBORNE LOCK AND DAM, NEAR MONROEVILLE, AL

LOCATION.--Lat 31°36'40", long 87°33'10", in NE¼SE¼ sec. 34, T. 8 N., R. 5 E., Monroe County, Hydrologic Unit 03150204, just upstream from Claiborne Lock and Dam, 3.5 mi upstream from Flat Creek, 3.8 mi downstream from Silver Creek, 15 mi northwest of Monroeville, and at mile 81.9.

DRAINAGE AREA.--21,473 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area. WDR AL-86-1: 1981, 1983-85 (maximum gage heights).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (datum published incorrectly 1976-77, 1979-85).

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated by reservoirs on Etowah, Coosa, Tallapoosa, and Alabama Rivers. (See Reservoirs in Mobile River basin).

AVERAGE DISCHARGE.--14 years, 32,710 ft³/s, 20.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 216,000 ft³/s, Apr.22, 1979, maximum gage height, 55.45 ft, Apr. 23, 1979; minimum daily, 3,890 ft³/s, Sept. 21, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 132,000 ft³/s, June 27, maximum gage height, 49.43 ft, June 27; minimum daily, 6,770 ft³/s, Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13600	8100	40000	95100	27500	42700	87200	13900	10600	56700	20000	19700
2	29100	7900	32000	92300	20800	67400	78400	24000	10900	81500	19700	14700
3	30400	9940	30400	95600	14500	94900	80800	24900	10300	85900	22200	12100
4	27900	15600	27400	86100	15500	94100	43400	27200	10300	72300	27100	12300
5	22200	28900	15200	78800	10700	85500	81300	27400	10200	78200	24800	12300
6	26900	30800	10100	56500	14300	90400	96000	28000	10800	94300	17900	11400
7	17700	15600	10500	41100	28200	110000	103000	27800	17000	103000	13600	11200
8	11900	24900	16400	35600	32900	123000	103000	18600	18300	103000	14600	11500
9	10400	18900	20400	33700	37200	113000	106000	25800	20600	100000	13100	11600
10	9320	16600	18200	31000	39600	102000	108000	26800	19200	92700	11000	10500
11	7470	19700	14600	30000	37400	87700	109000	27100	14900	81400	11500	11100
12	8720	13100	12300	32100	30600	73000	110000	27700	15100	69000	10500	10900
13	7210	14400	15100	53100	16900	65900	108000	24000	19700	51500	9190	12500
14	7370	21700	15600	61900	12700	85400	101000	15700	26300	49500	8830	14000
15	6790	19200	12500	83300	18200	54500	82200	18100	27400	44900	9480	12700
16	6910	20100	12200	87900	23600	52100	65700	22100	41700	51400	11900	13000
17	6770	25700	11400	82300	17000	45600	42300	17100	80100	42800	19700	11600
18	7080	30100	11400	91100	17600	33700	29500	19700	99900	43900	22700	10500
19	6980	22800	10400	67300	11100	27300	32100	20700	112000	42400	12300	11200
20	6880	27600	10500	53500	16200	20600	36800	16900	126000	32300	10400	9740
21	13300	49300	10500	51000	28100	30700	30700	11800	126000	30400	10200	10200
22	12400	56900	10800	46700	38900	42300	22700	11800	119000	36100	10800	10400
23	9840	47000	10700	30600	61400	81800	14700	15700	119000	43600	13500	16500
24	8360	38900	9450	16600	60000	87800	16400	19700	119000	44600	14100	17000
25	10400	25100	9100	18200	50000	85100	12000	19800	126000	59200	14300	18000
26	9720	27700	11400	17500	39600	82000	11900	26300	130000	66700	10600	24400
27	10300	22700	16800	18400	24400	78700	15200	14800	132000	60900	14700	25400
28	9910	37900	20500	22600	28400	75700	17800	10800	124000	42300	12600	27900
29	8100	62900	20100	13600	---	43600	11700	10700	102000	38800	15300	29200
30	7400	52200	22200	18300	---	77700	10500	10600	75800	27300	13900	30300
31	7710	---	44700	21700	---	87600	---	10500	---	20500	17400	---
TOTAL	379040	812240	532850	1563500	773300	2241800	1767300	616000	1874100	1847100	457900	453840
MEAN	12230	27070	17190	50440	27620	72320	58910	19870	62470	59580	14770	15130
MAX	30400	62900	44700	95600	61400	123000	110000	28000	132000	103000	27100	30300
MIN	6770	7900	9100	13600	10700	20600	10500	10500	10200	20500	8830	9740
CFSM	.57	1.26	.80	2.35	1.29	3.37	2.74	.93	2.91	2.77	.69	.70
IN.	.66	1.41	.92	2.71	1.34	3.88	3.06	1.07	3.25	3.20	.79	.79

CAL YR 1988 TOTAL 6320910 MEAN 17270 MAX 101000 MIN 4820 MEAN †17290 CFSM †0.81 IN. †10.96
WTR YR 1989 TOTAL 13318970 MEAN 36490 MAX 132000 MIN 6770 MEAN †36680 CFSM †1.71 IN. †23.18

† Adjusted for change in contents in Allatoona Reservoir, Weiss Lake, H. Neely Henry Reservoir, Logan Martin Reservoir, combined Lay, Mitchell, and Jordan Lakes, Harris Reservoir, and Lake Martin.

02428400 ALABAMA RIVER AT CLAIBORNE LOCK AND DAM, NEAR MONROEVILLE, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1982 to current year.
WATER TEMPERATURE: June 1982 to current year.

REMARKS.--No specific conductance data and water temperature data for several days due to equipment malfunctions.

COOPERATION.--Specific conductance and temperature data furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF ONCE DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 220 microsiemens, Dec. 9, 1987; minimum, 69 microsiemens, Apr. 14, 1983.
WATER TEMPERATURE: Maximum, 32.0°C, July 23 to Aug. 12, Aug. 21, 23, 1986; minimum, 5.0°C, Jan. 4-7, 1984.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 185 microsiemens, Dec. 31, Jan. 17; minimum, 90 microsiemens, Apr. 15, 16, Aug. 2.
WATER TEMPERATURE: Maximum, 31.0°C, Aug. 27 to Sept. 13; minimum, 11.0°C, Jan. 21-26, 29, 30, Feb. 10-13, 24-28, Mar. 1, 2, 7, 11.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	150	164	152	165	145	122	105	101	98	93	132
2	150	147	167	168	166	138	142	103	104	100	90	124
3	150	146	172	165	165	140	119	108	134	102	95	122
4	134	155	175	162	---	140	111	102	138	100	97	121
5	128	150	163	152	---	150	112	102	134	102	104	121
6	134	---	157	149	170	152	104	118	132	96	104	122
7	140	145	155	143	167	150	130	115	132	96	103	121
8	136	150	164	140	169	148	108	113	128	95	103	122
9	138	---	160	144	161	124	104	112	120	96	103	122
10	140	---	160	132	160	126	106	112	118	96	98	124
11	137	154	149	130	148	122	102	108	124	95	96	122
12	143	147	150	147	138	120	104	106	123	95	103	122
13	143	153	145	155	139	128	102	104	130	94	102	122
14	147	146	155	147	128	120	103	98	129	94	102	123
15	144	160	154	152	147	118	90	97	133	92	100	123
16	145	146	150	170	147	128	90	99	140	94	103	170
17	143	138	144	185	140	118	93	98	122	98	101	134
18	146	142	148	166	130	120	100	98	120	103	101	132
19	142	140	156	176	138	122	100	97	126	101	102	132
20	142	158	165	172	140	108	102	110	111	93	102	120
21	150	128	165	152	138	104	108	112	110	92	105	122
22	150	148	170	140	139	116	108	101	105	97	98	123
23	148	155	165	147	134	114	112	100	103	96	101	133
24	150	148	170	145	133	110	118	101	102	95	103	126
25	150	150	160	164	148	110	120	106	98	95	104	120
26	154	155	165	164	145	128	116	103	102	94	135	116
27	160	160	152	175	138	127	121	124	98	96	120	138
28	155	150	150	161	149	125	121	113	103	96	121	131
29	150	150	175	181	---	120	121	134	106	94	126	123
30	154	165	172	172	---	118	122	122	102	92	120	---
31	150	---	185	161	---	117	---	122	---	94	124	---
TOTAL	4508	---	4982	4869	---	3906	3311	3343	3528	2981	3259	---
MEAN	145	---	161	157	---	126	110	108	118	96	105	---
MAX	160	---	185	185	---	152	142	134	140	103	135	---
MIN	128	---	144	130	---	104	90	97	98	92	90	---

02428400 ALABAMA RIVER AT CLAIBORNE LOCK AND DAM, NEAR MONROEVILLE, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.0	20.0	16.0	13.0	12.0	11.0	17.0	25.0	27.0	26.0	28.0	31.0
2	27.0	20.0	16.0	13.0	13.0	11.0	17.0	25.0	27.0	26.0	28.0	31.0
3	26.0	20.0	15.0	13.0	14.0	12.0	17.0	24.0	28.0	26.0	29.0	31.0
4	25.0	20.0	15.0	12.0	---	13.0	18.0	24.0	28.0	26.0	29.0	31.0
5	25.0	20.0	15.0	12.0	---	13.0	18.0	24.0	28.0	27.0	30.0	31.0
6	24.0	---	14.0	12.0	13.0	12.0	18.0	23.0	28.0	27.0	30.0	31.0
7	23.0	19.0	14.0	13.0	12.0	11.0	18.0	22.0	28.0	27.0	29.0	31.0
8	23.0	19.0	14.0	13.0	12.0	12.0	17.0	21.0	27.0	26.0	29.0	31.0
9	23.0	---	14.0	13.0	13.0	12.0	17.0	22.0	26.0	26.0	29.0	31.0
10	23.0	---	14.0	13.0	11.0	12.0	16.0	23.0	27.0	26.0	29.0	31.0
11	23.0	19.0	14.0	13.0	11.0	11.0	16.0	23.0	28.0	26.0	29.0	31.0
12	22.0	20.0	13.0	13.0	11.0	12.0	15.0	22.0	28.0	26.0	29.0	31.0
13	22.0	20.0	13.0	13.0	11.0	12.0	15.0	22.0	28.0	26.0	29.0	31.0
14	22.0	19.0	13.0	13.0	12.0	13.0	15.0	22.0	28.0	27.0	29.0	30.0
15	22.0	19.0	13.0	13.0	12.0	14.0	15.0	22.0	27.0	27.0	29.0	30.0
16	22.0	19.0	13.0	13.0	13.0	13.0	16.0	22.0	26.0	27.0	29.0	29.0
17	21.0	19.0	12.0	12.0	13.0	12.0	16.0	22.0	26.0	27.0	29.0	29.0
18	21.0	18.0	12.0	12.0	13.0	15.0	17.0	22.0	27.0	27.0	29.0	29.0
19	22.0	18.0	12.0	12.0	13.0	15.0	17.0	22.0	27.0	28.0	29.0	29.0
20	21.0	18.0	12.0	12.0	12.0	16.0	17.0	23.0	25.0	29.0	29.0	29.0
21	21.0	18.0	12.0	11.0	12.0	16.0	18.0	23.0	25.0	29.0	29.0	29.0
22	21.0	18.0	12.0	11.0	12.0	16.0	18.0	23.0	25.0	28.0	30.0	29.0
23	21.0	18.0	12.0	11.0	12.0	16.0	18.0	24.0	25.0	28.0	30.0	28.0
24	21.0	18.0	12.0	11.0	11.0	16.0	19.0	24.0	25.0	27.0	30.0	25.0
25	20.0	17.0	12.0	11.0	11.0	15.0	20.0	24.0	25.0	28.0	30.0	25.0
26	20.0	17.0	12.0	11.0	11.0	15.0	20.0	24.0	25.0	28.0	30.0	25.0
27	20.0	18.0	12.0	12.0	11.0	15.0	20.0	25.0	23.0	28.0	31.0	25.0
28	20.0	17.0	12.0	12.0	11.0	15.0	22.0	25.0	25.0	28.0	31.0	24.0
29	20.0	17.0	12.0	11.0	---	16.0	22.0	26.0	25.0	28.0	31.0	24.0
30	20.0	16.0	12.0	11.0	---	16.0	22.0	26.0	26.0	28.0	31.0	---
31	20.0	---	12.0	12.0	---	15.0	---	26.0	---	28.0	31.0	---
TOTAL	688.0	---	406.0	377.0	---	423.0	531.0	725.0	793.0	841.0	914.0	---
MEAN	22.2	---	13.1	12.2	---	13.6	17.7	23.4	26.4	27.1	29.5	---
MAX	27.0	---	16.0	13.0	---	16.0	22.0	26.0	28.0	29.0	31.0	---
MIN	20.0	---	12.0	11.0	---	11.0	15.0	21.0	23.0	26.0	28.0	---

MOBILE RIVER MAIN STEM

02428401 ALABAMA RIVER BELOW CLAIBORNE LOCK AND DAM, NEAR MONROEVILLE, AL

LOCATION.--Lat 31°36'40", long 87°33'10", in NE¼SE¼ sec. 34, T. 8 N., R. 5 E., Monroe County, Hydrologic Unit 03150204, at downstream end of Claiborne Lock and Dam, 3.4 mi upstream from Flat Creek, 3.7 mi downstream from Silver Creek, 15 mi northwest of Monroeville, and at mile 81.8.

DRAINAGE AREA.--21,473 mi².

PERIOD OF RECORD.--December 1969 to current year (gage heights only). October 1971 to current year in reports of Geological Survey. December 1969 to September 1971 in files of U.S. Army Corps of Engineers.

REVISED RECORD.--WDR AL-84-1: Drainage area. WDR AL-86-1: 1979-81.

GAGE.--Water-stage recorder. Datum of gage is 8.00 ft below National Geodetic Vertical Datum of 1929 (datum published incorrectly 1980-85).

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 63.0 ft, Apr. 22, 23, 1979; minimum, 14.0 ft, Oct. 8, 1986.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 56.8 ft, June 27; minimum, 15.5 ft, Oct. 15-20.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.80	16.00	33.40	39.70	26.60	29.50	44.70	19.30	18.30	46.80	26.10	22.60
2	23.10	16.10	31.00	44.20	26.20	35.30	44.20	25.00	18.40	42.80	25.00	22.20
3	28.80	16.60	29.50	46.10	22.90	40.60	42.00	26.10	18.40	39.20	24.60	19.90
4	28.90	18.20	29.10	46.20	22.80	43.50	37.60	26.60	18.30	42.90	26.30	19.70
5	26.80	24.00	24.90	43.10	20.70	43.00	38.30	27.60	18.20	44.70	27.70	19.50
6	27.10	28.40	21.00	39.80	19.90	42.20	44.50	28.00	18.20	46.50	25.80	19.30
7	25.60	24.00	19.30	36.10	24.30	44.80	47.30	28.20	20.00	47.60	22.20	18.60
8	22.10	24.20	19.90	32.20	27.20	47.20	49.30	24.90	21.80	48.50	20.90	18.90
9	19.30	25.40	23.80	31.50	29.90	48.40	49.90	25.40	24.00	48.60	20.70	18.90
10	18.50	22.30	22.70	30.00	31.10	48.80	50.90	27.30	24.40	48.00	19.60	18.50
11	16.90	22.70	24.10	29.20	31.60	47.90	52.00	27.60	22.80	46.50	19.30	18.50
12	16.80	23.20	20.50	29.00	29.90	45.70	52.60	28.00	20.90	44.20	18.70	18.60
13	16.30	20.00	20.40	32.60	25.80	43.80	52.50	27.90	22.80	38.70	18.00	19.80
14	16.00	23.10	21.80	35.80	22.20	41.40	51.70	24.90	24.70	37.20	17.40	19.80
15	15.50	24.20	20.40	39.10	21.10	39.10	49.80	22.40	27.40	35.00	17.30	19.40
16	15.50	23.10	20.30	42.50	25.10	36.50	45.50	24.50	28.50	36.20	17.80	20.10
17	15.50	25.50	19.40	43.40	23.90	35.80	39.60	23.70	38.20	34.70	20.60	19.40
18	15.50	27.90	19.10	41.60	22.50	32.10	32.00	22.80	42.20	34.20	25.10	18.70
19	15.50	28.00	19.10	40.00	21.30	30.40	30.80	24.10	45.00	34.20	22.60	18.50
20	15.50	25.40	19.00	37.50	19.10	27.00	32.20	24.20	47.00	32.00	19.50	18.00
21	15.60	31.30	18.80	35.70	24.80	28.00	30.70	22.60	49.30	30.40	18.40	17.70
22	21.50	34.90	18.80	35.00	28.90	30.20	28.80	21.20	51.10	29.70	18.50	17.80
23	18.30	34.80	18.90	32.90	34.80	37.10	25.40	21.00	52.40	32.60	19.20	18.60
24	17.60	33.10	18.30	26.90	36.70	42.00	22.90	23.10	53.70	33.50	19.90	22.30
25	17.30	29.60	17.80	26.00	35.40	43.20	21.90	24.10	54.90	35.00	20.30	21.90
26	17.40	27.20	17.70	25.80	32.90	43.50	20.00	25.70	56.00	37.90	20.00	24.80
27	17.80	26.70	18.70	24.00	29.80	42.80	20.20	26.20	56.80	38.80	18.40	26.20
28	17.80	27.90	22.70	27.40	28.20	42.00	22.60	20.80	56.60	35.10	21.20	26.70
29	17.00	35.50	24.00	23.70	---	37.50	22.10	19.40	54.60	33.70	20.30	28.00
30	16.10	36.00	23.60	22.00	---	36.40	19.90	18.80	50.70	31.40	20.50	28.30
31	16.10	---	26.80	24.60	---	42.50	---	18.20	---	27.60	20.60	---
MEAN	19.02	25.84	22.09	34.31	26.63	39.62	37.40	24.18	35.19	38.52	21.05	20.71
MAX	28.90	36.00	33.40	46.20	36.70	48.80	52.60	28.20	56.80	48.60	27.70	28.30
MIN	15.50	16.00	17.70	22.00	19.10	27.00	19.90	18.20	18.20	27.60	17.30	17.70

CAL YR 1988 MEAN 21.15 MAX 47.20 MIN 14.40
WTR YR 1989 MEAN 28.72 MAX 56.80 MIN 15.50

02429500 ALABAMA RIVER AT CLAIBORNE, AL
(National stream-quality accounting network station)

LOCATION.--Lat 31°32'48", long 87°30'45", in sec. 25, T. 7 N., R. 5 E., Monroe County, Hydrologic Unit 03150204, near left bank on downstream side of bridge on U.S. Highway 84 at Claiborne, 0.5 mi downstream from Limestone Creek, 12 mi west of Monroeville, and at mile 76.1.

DRAINAGE AREA.--21,967 mi^2.

PERIOD OF RECORD.--March 1966 to September 1968, October 1969 to current year.

PERIOD OF DAILY RECORD.--
CHEMICAL ANALYSES: March 1966 to September 1968.
SPECIFIC CONDUCTANCE: March 1966 to September 1968, May 1974 to September 1981.
WATER TEMPERATURES: March 1966 to September 1968, May 1974 to September 1981.

REVISED RECORD.--WDR AL-84-1: Drainage area.

REMARKS.--Miscellaneous samples of chemical data published for water year 1965. "A specific conductance of 38 microsiemens was observed on Feb. 20, 1980. A temperature of 33°C was observed on Aug. 25, 1980."

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: (Water years 1966-68, 1975-79, 1981). Maximum, 255 microsiemens, Oct. 22, 1977; minimum 66 microsiemens Mar. 10, 1966.
WATER TEMPERATURES: (Water years 1966-68, 1975-79, 1981). Maximum, 32.5°C, July 21-24, 28, Aug. 16, 17, 1981; minimum, (water years 1967-68, 1975-81), 4.0°C, Jan. 17-18, Feb. 24-25, Mar. 1, 1968.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	DIS- SOLVED (PER- CENT SATUR- ATION)
OCT											
21...	0900	--	9590	155	165	7.90	21.0	7.0	761	9.1	102
NOV											
21...	1200	25.0	44000	--	--	--	--	--	--	--	--
21...	1205	50.0	44000	--	--	--	--	--	--	--	--
21...	1210	75.0	44000	--	--	--	--	--	--	--	--
DEC											
08...	0830	--	14100	--	165	--	13.5	11	767	11.9	113
JAN											
05...	1430	25.0	78000	--	--	--	--	--	--	--	--
05...	1435	50.0	78000	--	--	--	--	--	--	--	--
05...	1445	75.0	78000	--	--	--	--	--	--	--	--
FEB											
06...	1335	25.0	14100	--	--	--	--	--	--	--	--
06...	1344	50.0	14100	--	--	--	--	--	--	--	--
06...	1355	75.0	14100	--	--	--	--	--	--	--	--
24...	0850	--	61100	130	135	--	6.0	18	774	11.5	91
MAR											
30...	1808	25.0	73000	--	--	--	--	--	--	--	--
30...	1813	50.0	73000	--	--	--	--	--	--	--	--
30...	1821	75.0	73000	--	--	--	--	--	--	--	--
APR											
14...	0850	--	10100	85	92	7.10	14.0	31	760	8.7	85
MAY											
03...	1537	25.0	24500	--	--	--	--	--	--	--	--
03...	1542	50.0	24500	--	--	--	--	--	--	--	--
03...	1549	75.0	24500	--	--	--	--	--	--	--	--
JUN											
09...	0900	--	17700	140	143	7.60	27.5	8.6	759	7.8	99
14...	1238	25.0	23000	--	--	--	--	--	--	--	--
14...	1242	50.0	23000	--	--	--	--	--	--	--	--
14...	1252	75.0	23000	--	--	--	--	--	--	--	--
AUG											
01...	1746	25.0	20100	--	--	--	--	--	--	--	--
01...	1750	50.0	20100	--	--	--	--	--	--	--	--
01...	1755	75.0	20100	--	--	--	--	--	--	--	--
18...	0830	--	22400	124	--	7.50	29.5	--	764	8.5	111
SEP											
13...	1700	25.0	9500	--	--	--	--	--	--	--	--
13...	1705	50.0	9500	--	--	--	--	--	--	--	--
13...	1715	75.0	9500	--	--	--	--	--	--	--	--

02429500 ALABAMA RIVER AT CLAIBORNE, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3
OCT 21...	1	16	52	1	15	3.6	13	34	0.8	2.2	0
DEC 08...	12	20	53	4	16	3.2	11	30	.7	2.5	0
FEB 24...	600	35	47	11	14	2.9	7.9	26	.5	1.6	0
APR 14...	440	150	36	6	11	2.1	3.8	18	.3	1.4	0
JUN 09...	K1	130	45	0	13	3.1	9.5	30	.6	1.7	0
AUG 18...	K3	85	--	--	--	--	--	--	--	--	0

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
OCT 21...	63	52	7.80	51	17	10	0.10	6.6	103	99	0.14
DEC 08...	60	49	7.40	49	17	11	.10	6.6	104	98	.14
FEB 24...	44	36	7.70	36	15	7.9	.10	6.1	83	79	.11
APR 14...	37	30	7.40	30	7.0	3.6	.10	7.0	67	55	.09
JUN 09...	48	40	7.90	45	11	8.4	.10	6.2	81	81	.11
AUG 18...	47	38	--	37	--	--	--	--	--	--	--

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT 21...	2670	--	<.010	0.100	0.040	0.040	0.66	0.70	0.030	0.020	<.010
DEC 08...	3960	0.120	.030	.150	.040	.030	.46	.50	.070	.050	.030
FEB 24...	13700	--	<.010	.310	.050	.040	.55	.60	.090	.020	.020
APR 14...	18300	--	<.010	.190	.050	.040	.35	.40	.100	.030	.020
JUN 09...	3870	.130	.040	.170	.080	.050	.72	.80	.020	<.010	.020
AUG 18...	--	--	<.010	<.100	.010	.010	.79	.80	.060	<.010	<.010

DATE	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 21...	0.03	0.02	20	1	35	<.5	<1	<1	<3	<1	57
DEC 08...	.07	.02	--	--	--	--	--	--	--	--	--
FEB 24...	.09	.0	30	<1	27	<.5	<1	<1	<3	2	140
APR 14...	.10	.01	50	<1	24	<.5	2	2	<3	5	230
JUN 09...	.02	--	--	--	--	--	--	--	--	--	--
AUG 18...	.06	--	--	--	--	--	--	--	--	--	--

02429500 ALABAMA RIVER AT CLAIBORNE, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT											
21...	<5	5	7	<.1	<10	<1	<1	<1.0	61	<6	4
FEB											
24...	<5	<4	5	<.1	<10	<1	<1	<1.0	58	<6	58
APR											
14...	<5	<4	6	<.1	<10	<1	<1	1.0	50	<6	5

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
FEB								
24...	<.4	0.5	1.6	1.2	1.4	1.1	0.03	0.05

DATE	TIME	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT				
21...	0900	--	--	--
NOV				
21...	1200	121	14400	--
21...	1205	119	14100	--
21...	1210	128	15200	--
DEC				
08...	0830	12	445	99
JAN				
05...	1430	80	16800	--
05...	1435	88	18500	--
05...	1445	104	21900	--
FEB				
06...	1335	6	228	--
06...	1344	10	381	--
06...	1355	14	533	--
24...	0850	54	8920	79
MAR				
30...	1808	172	33900	--
30...	1813	195	38400	--
30...	1821	209	41200	--
APR				
14...	0850	222	60500	49
MAY				
03...	1537	20	1320	--
03...	1542	28	1850	--
03...	1549	21	1390	--
JUN				
09...	0900	24	1150	95
14...	1238	15	931	--
14...	1242	13	807	--
14...	1252	22	1370	--
AUG				
01...	1746	31	1680	--
01...	1750	20	1090	--
01...	1755	23	1250	--
18...	0830	30	1810	92
SEP				
13...	1700	14	359	--
13...	1705	15	385	--
13...	1715	18	462	--

02444160 TOMBIGBEE RIVER AT BEVILL LOCK AND DAM, NEAR PICKENSVILLE, AL

LOCATION.--Lat 33°12'38", long 88°17'19", in NW¼ sec. 26, T. 21 S., R. 17 W., Pickens County, Hydrologic Unit 03160106, near left bank at dam, 2 mi southwest of Pickensville, 10 mi northwest of Aliceville, and at mile 287.7.

DRAINAGE AREA.--5,750 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records good. Records since Jan. 16, 1985, include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway.

AVERAGE DISCHARGE.--9 years, 8,315 ft³/s, 19.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 130,000 ft³/s, May 23, 1983; maximum gage height, 41.95 ft, May 24, 1983; minimum daily, 196 ft³/s, Oct. 22, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 101,000 ft³/s, Jan. 16; maximum gage height, 38.18 ft, Jan. 16; minimum daily, 698 ft³/s, Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5350	2780	8110	39100	12900	64400	13500	5320	1450	11000	4130	1890
2	9080	2430	6250	27300	10100	59400	8910	4560	2590	17500	7540	2560
3	10600	1430	5020	24700	9980	57400	8570	3640	4790	16700	5930	1750
4	7320	2340	4600	25300	8950	43700	21100	5990	6440	22400	3760	1900
5	6910	2310	3370	18300	9800	38300	46700	17800	12600	26100	2950	873
6	5090	1770	3840	14000	25000	58900	32200	31200	22300	22500	2880	1650
7	3810	3550	2870	9430	16200	52700	25200	19200	20300	21000	7580	938
8	2290	2560	2670	17000	15400	49100	24000	17500	17900	18000	3770	1230
9	2440	2000	3150	20700	14800	45500	17600	16900	26600	13800	2620	1610
10	1890	2200	2500	19800	8370	28300	11700	16700	19800	12200	2630	2220
11	1560	1820	2540	24500	9530	17200	8650	11200	14200	14500	2840	986
12	1820	2490	2510	51100	7160	13100	7360	9010	12300	10100	954	4350
13	977	4820	2430	68900	6370	9360	6590	7270	15000	12400	2750	2260
14	1130	3000	2480	93200	7080	8330	5870	7500	19000	16500	1500	3460
15	1230	3730	2270	99500	19000	9090	5220	11200	41000	14700	1520	2760
16	1560	3730	1930	99900	14300	6330	5500	7850	48900	18700	1650	1780
17	770	3050	1630	84800	12400	6180	5410	6180	46800	36200	2190	1450
18	1420	2620	2310	45700	24300	6380	4820	4780	43000	17300	3360	1720
19	2700	8090	1580	31800	29300	5350	2890	7810	40700	15300	698	1270
20	1190	25500	1540	19400	24800	5600	5510	7350	29000	18200	2560	1130
21	2110	15600	2850	13400	47600	12100	4800	12300	18100	13900	1320	1060
22	1240	12000	2420	10100	60900	15700	4510	8460	16000	8120	1950	2630
23	1730	10500	9930	7610	56100	14600	4340	6560	14700	6050	3180	4800
24	2360	12400	13600	7200	48700	12700	2750	7050	10800	5430	1590	2100
25	732	8620	9430	6460	38200	10300	3240	6370	7900	6870	2470	3600
26	2370	7540	7950	6020	23600	8360	3560	4680	5940	5920	2020	3790
27	1570	21900	6310	6680	17700	7190	2720	4150	4840	4940	2350	2100
28	3060	15400	11700	6540	59100	6100	2790	2680	5000	4050	1600	3390
29	3220	11700	18500	5280	---	9630	3660	2980	10100	4120	1440	9790
30	3280	10200	13800	12700	---	22300	3810	2290	6440	3810	1620	19200
31	2400	---	36100	13300	---	16000	---	2130	---	3390	3220	---
TOTAL	93209	208080	196190	929720	637640	719600	303480	278610	544490	421700	86572	90247
MEAN	3007	6936	6329	29990	22770	23210	10120	8987	18150	13600	2793	3008
MAX	10600	25500	36100	99900	60900	64400	46700	31200	48900	36200	7580	19200
MIN	732	1430	1540	5280	6370	5350	2720	2130	1450	3390	698	873
CFSM	.52	1.21	1.10	5.22	3.96	4.04	1.76	1.56	3.16	2.37	.49	.52
IN.	.60	1.35	1.27	6.01	4.13	4.66	1.96	1.80	3.52	2.73	.56	.58

CAL YR 1988 TOTAL 1544159 MEAN 4219 MAX 36100 MIN 351 CFSM .73 IN. 9.99
WTR YR 1989 TOTAL 4509538 MEAN 12350 MAX 99900 MIN 698 CFSM 2.15 IN. 29.17

02446500 SIPSEY RIVER NEAR ELROD, AL

LOCATION.--Lat 33°15'25", long 87°46'35", in NE¼ sec. 3, T. 21 S., R. 12 W., Tuscaloosa County, Hydrologic Unit 03160107, on left bank at downstream side of bridge on State Highway 140, 0.2 mi upstream from Gulf, Mobile & Ohio Railroad bridge, 1.0 mi east of Elrod, 2.0 mi downstream from Box Creek, and at mile 50.7.

DRAINAGE AREA.--528 mi².

PERIOD OF RECORD.--August 1928 to March 1932, October 1939 to September 1971, October 1978 to current year.

REVISED RECORDS.--WSP 1434: 1929. WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 197.81 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 31, 1932, nonrecording gage at railroad bridge 0.2 mi downstream from present site at datum 1.93 ft higher. Nov. 1 to Dec. 11, 1939, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report. U.S. Army Corps of Engineers telemeter at station.

AVERAGE DISCHARGE.--46 years (water years 1929-31, 1940-71, 1979-89), 774 ft³/s, 19.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,800 ft³/s, Feb. 23, 1961, gage height, 18.83 ft; minimum, 12 ft³/s, Sept. 20, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 16	1100	*9,300	*15.40	Apr. 9	1200	4,640	14.38
Mar. 3	2400	8,050	15.15				

Minimum discharge, 87 ft³/s, Sept. 10, 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	599	326	1330	1000	789	2800	1200	299	175	670	418	117
2	676	321	1500	1080	803	2670	1130	349	176	1470	378	131
3	740	268	1670	1170	867	5540	1170	332	214	2560	412	146
4	769	238	1540	1430	943	7080	1320	349	223	2090	362	147
5	786	293	1240	2480	992	5270	1870	513	245	2130	310	133
6	801	335	1000	3240	1060	4790	1770	631	490	2140	277	117
7	832	403	834	2820	1180	4130	1710	681	653	1880	257	105
8	856	416	656	2500	1270	3300	2570	730	752	1610	248	97
9	742	399	545	2400	1530	2970	4390	811	1000	1530	220	92
10	471	360	484	2380	1990	2960	3620	966	1260	1470	222	88
11	322	315	443	2260	2260	2980	2720	1170	1220	1210	218	87
12	259	290	412	2820	2070	2430	2070	1070	1120	960	199	89
13	220	330	386	4330	1690	1890	1630	880	1160	823	176	110
14	194	415	364	5500	1340	1510	1310	695	1490	812	161	141
15	175	450	345	7560	1100	1230	1100	792	3590	865	151	243
16	162	485	329	9110	970	1060	975	758	3430	916	144	188
17	150	520	314	7670	880	961	880	672	2670	981	150	147
18	140	500	299	5260	801	887	781	584	2460	1030	201	134
19	137	430	285	4250	758	808	698	522	2200	960	194	130
20	138	475	273	3550	735	739	632	473	2110	928	172	127
21	151	610	264	2820	853	786	566	426	2850	913	163	117
22	172	675	261	2200	979	877	528	385	3970	942	150	108
23	176	755	321	1750	1120	928	514	354	3420	978	137	125
24	180	845	454	1420	1370	1020	487	335	2590	983	126	132
25	183	970	526	1170	2050	1220	443	319	2060	949	117	165
26	176	1340	596	1020	3230	1350	401	352	1550	904	109	218
27	167	2490	667	926	2820	1280	367	352	1220	888	103	228
28	159	2410	728	844	2900	1130	340	288	1060	914	105	226
29	163	1760	755	762	---	1050	319	241	961	876	117	371
30	178	1380	716	758	---	1280	301	211	802	703	110	480
31	229	---	801	794	---	1310	---	190	---	527	110	---
TOTAL	11103	20804	20338	87274	39350	68236	37812	16730	47121	36612	6217	4739
MEAN	358	693	656	2815	1405	2201	1260	540	1571	1181	201	158
MAX	856	2490	1670	9110	3230	7080	4390	1170	3970	2560	418	480
MIN	137	238	261	758	735	739	301	190	175	527	103	87
CFSM	.68	1.31	1.24	5.33	2.66	4.17	2.39	1.02	2.97	2.24	.38	.30
IN.	.78	1.47	1.43	6.15	2.77	4.81	2.66	1.18	3.32	2.58	.44	.33

CAL YR 1988 TOTAL 147339 MEAN 403 MAX 2900 MIN 33 CFSM .76 IN. 10.38
WTR YR 1989 TOTAL 396336 MEAN 1086 MAX 9110 MIN 87 CFSM 2.06 IN. 27.92

02447025 TOMBIGBEE RIVER AT GAINESVILLE LOCK AND DAM, NEAR GAINESVILLE, AL

LOCATION.--Lat 32°50'53", long 88°09'22", in N½ sec. 36, T. 22 N., R. 2 W., Greene County, Hydrologic Unit 03160106, near left bank at dam, 1.0 mi downstream from Turkey Paw Branch, 1.8 mi north of Gainesville, 2.4 mi upstream from Noxubee River, and at mile 238.6.

DRAINAGE AREA.--7,230 mi².

PERIOD OF RECORD.--March 1978 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 65.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records good. Records since Jan. 16, 1985 include diversions from Tennessee River basin through Bay Springs lock on Tennessee Tombigbee Waterway.

AVERAGE DISCHARGE.--11 years, 11,460 ft³/s, 21.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 134,000 ft³/s, May 25, 1983; maximum gage height, 55.74 ft, Apr. 15, 1979; minimum daily, 93 ft³/s, Oct. 6, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 119,000 ft³/s, Jan. 17; maximum gage height, 47.10 ft, Jan. 18; minimum daily, 255 ft³/s, Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7810	3270	11900	46200	15300	71600	20800	6360	1960	11400	4640	3360
2	17700	2870	9270	38800	13000	75100	15700	3610	2400	23600	9030	2420
3	19500	689	6980	29300	11100	72400	11800	4130	4760	27000	7670	1650
4	17000	2680	6180	29300	11500	68000	15500	5730	7020	32200	4580	1930
5	7860	4100	5450	24400	11600	55800	46400	14000	10400	35800	4060	445
6	7040	1860	4650	18200	24100	65000	48700	31200	21200	32700	2790	2260
7	5320	3680	5180	12000	26000	68300	35000	25200	24200	27700	8420	1130
8	3170	3720	4580	16800	18800	68300	30000	20100	19900	24800	4260	1120
9	3320	2300	3510	25700	19600	63600	28700	18600	30600	19400	3190	839
10	2150	2540	4430	27100	12200	49000	20000	19200	26100	16900	2450	2640
11	2510	2150	3310	28000	12100	28700	14700	13900	18900	17000	3190	1830
12	2550	2640	3340	46600	9920	19100	13800	9850	14900	16700	1180	4190
13	807	6910	3120	67500	8490	15300	11600	8810	15500	14500	2890	1860
14	1320	3560	2500	77800	9770	12600	10400	10000	20400	19500	1860	3500
15	1700	4460	3420	107000	18000	12100	8840	16600	37800	18700	2030	2890
16	1340	3690	2120	112000	20400	10100	7960	11100	53000	15900	1840	1930
17	685	4510	2390	110000	13500	9040	7490	8310	57000	33300	2350	1630
18	1890	2900	2230	107000	22000	8350	6980	7120	54800	28400	4070	1590
19	2910	7590	2270	79200	29800	7600	4790	10400	50300	16200	546	1880
20	990	25500	1720	42600	28200	7090	8000	9740	42800	19600	3150	255
21	2800	22400	3520	23800	39900	14200	6880	13400	25700	18600	825	1640
22	1310	14500	2670	18000	61100	18600	5700	11800	19800	13300	2670	1870
23	1640	12000	8790	13600	68000	20100	4830	8780	19600	8140	3740	4730
24	3260	13300	15600	11200	64800	20300	4030	8030	17600	6980	1340	2100
25	542	9990	11400	10300	53200	15000	3950	8020	14200	8110	2540	3640
26	2460	8800	8950	7990	35800	13200	4180	6240	10700	7850	3050	4560
27	1420	23000	7680	9390	21600	10600	3020	4320	8400	7460	1770	2710
28	2610	22300	11000	8340	43700	7910	3610	2930	7000	5250	2410	3210
29	4200	15400	20600	7200	---	12000	3700	2990	11700	4820	1460	9570
30	2610	13700	14200	13700	---	31100	3730	2420	9310	5640	1660	19200
31	3130	---	33100	18100	---	24800	---	2030	---	3830	2180	---
TOTAL	133554	247009	226060	1187120	723480	974890	410790	324920	657950	541280	97841	92579
MEAN	4308	8234	7292	38290	25840	31450	13690	10480	21930	17460	3156	3086
MAX	19500	25500	33100	112000	68000	75100	48700	31200	57000	35800	9030	19200
MIN	542	689	1720	7200	8490	7090	3020	2030	1960	3830	546	255
CFSM	.60	1.14	1.01	5.30	3.57	4.35	1.89	1.45	3.03	2.42	.44	.43
IN.	.69	1.27	1.16	6.11	3.72	5.02	2.11	1.67	3.39	2.79	.50	.48

CAL YR 1988 TOTAL 1817028 MEAN 4965 MAX 33100 MIN 213 CFSM .69 IN. 9.35
WTR YR 1989 TOTAL 5617473 MEAN 15390 MAX 112000 MIN 255 CFSM 2.13 IN. 28.90

02448500 NOXUBEE RIVER NEAR GEIGER, AL

LOCATION.--Lat 32°55'57", long 88°17'52", in NE¼ sec. 33, T. 23 N., R. 3 W., Sumter County, Hydrologic Unit 03160108, near right bank on downstream side of bridge on State Highway 17, 0.1 mi upstream from Woodward Creek, 2.1 mi upstream from St. Louis-San Francisco Railroad bridge, 5 mi north of Geiger, and at mile 16.9.

DRAINAGE AREA.--1,097 mi^2.

PERIOD OF RECORD.--March 1939 to September 1940, July 1944 to September 1965, October 1965 to September 1966 (gage heights only), October 1966 to current year. (Monthly discharge only for period October to December 1966.)

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 86.08 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1940, nonrecording gage at site of old highway bridge 1 mi downstream at datum 1.44 ft lower. July 26, 1944 to June 5, 1949, nonrecording gage at site on old river channel 1 mi south at same datum. June 6, 1949 to Sept. 30, 1984, at site on old river channel 1 mi south at same datum. Water-stage recorder for Tombigbee River at Gainesville is used as an auxiliary gage for this station.

REMARKS.--Estimated daily discharges: Apr. 19 to May 5, May 29 to June 2, and Aug. 13-15. Records fair except those for period of estimated record, which are poor. Discharge includes flow of old river channel at bridge on State Highway 17, 1 mi south of gage. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--45 years (water years 1940, 1945-65, 1967-89), 1,564 ft^3/s, 19.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 156,000 ft^3/s, Apr. 14, 1979, gage height, 48.58 ft; minimum, 13 ft^3/s, July 7, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,600 ft^3/s, Jan. 19, gage height, 34.46 ft; minimum, 78 ft^3/s, Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	118	1090	7520	1400	6820	5400	385	335	3970	561	154
2	955	117	863	6770	1290	6810	3450	370	320	5480	542	159
3	2050	115	691	5220	1290	6650	2070	370	1160	8140	1270	140
4	1700	114	579	3180	1180	6620	2030	475	1970	8620	1500	136
5	1320	991	501	2260	1120	8590	5110	755	1410	7730	803	145
6	1020	822	446	2020	3520	10600	5910	2370	1960	6650	674	141
7	837	557	406	1690	5550	9880	5890	3280	1950	5710	573	130
8	543	346	378	1270	5130	9240	5850	3160	2580	5460	477	123
9	316	228	358	1920	4060	8380	6480	2520	7250	6640	372	118
10	201	180	337	4960	2760	7040	6850	2850	7460	6460	329	119
11	140	149	326	5500	2140	4860	6480	3430	6130	6110	293	144
12	114	162	323	6030	1600	2500	5630	3650	3840	5410	288	171
13	101	1730	322	7360	1240	1340	3260	3430	2220	3860	260	295
14	92	1430	317	8270	1060	1040	1280	3490	2540	2470	225	467
15	85	957	309	8740	927	900	958	5860	4990	1960	190	553
16	81	645	333	8690	831	806	831	5460	5310	1490	180	454
17	80	528	337	9140	752	743	750	4210	3920	1370	284	354
18	79	462	340	10400	709	739	689	2970	2330	1430	429	287
19	82	995	313	11500	695	662	610	4390	1710	1460	478	234
20	95	5660	292	11000	1180	611	585	4870	2000	1660	233	204
21	723	6670	278	9410	4870	1850	555	4520	1860	1560	181	178
22	755	6030	274	5870	6560	4050	540	4520	1200	1660	205	162
23	698	3650	859	1510	6250	4230	525	3230	1140	1070	204	155
24	535	1220	1390	958	5540	5220	500	3560	921	734	176	502
25	474	827	1260	846	5040	3460	485	3420	739	681	159	682
26	397	789	1000	769	4510	2210	470	2540	726	508	213	590
27	298	4170	803	710	4180	1640	450	1490	734	450	213	688
28	214	4500	808	661	5540	1260	440	928	682	486	153	534
29	155	3080	972	621	---	1610	420	645	665	530	140	881
30	123	1570	1220	1870	---	6430	400	470	2670	511	142	2460
31	116	---	5310	2170	---	6740	---	365	---	540	141	---
TOTAL	14633	48812	23035	148835	80924	133531	74898	83983	72722	100810	11888	11360
MEAN	472	1627	743	4801	2890	4307	2497	2709	2424	3252	383	379
MAX	2050	6670	5310	11500	6560	10600	6850	5860	7460	8620	1500	2460
MIN	79	114	274	621	695	611	400	365	320	450	140	118
CFSM	.43	1.48	.68	4.38	2.63	3.93	2.28	2.47	2.21	2.96	.35	.35
IN.	.50	1.66	.78	5.05	2.74	4.53	2.54	2.85	2.47	3.42	.40	.39

CAL YR 1988 TOTAL 217225 MEAN 594 MAX 6670 MIN 47 CFSM .54 IN. 7.37
WTR YR 1989 TOTAL 805431 MEAN 2207 MAX 11500 MIN 79 CFSM 2.01 IN. 27.31

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL
(National stream-quality accounting network station)

LOCATION.--Lat 32°49'30", long 88°09'24", in SE¼ sec. 2, T. 21 N., R. 2 W., Sumter County, Hydrologic Unit 03160106, near right bank on downstream side of bridge on State Highway 39 at Gainesville, 2 mi downstream from Noxubee River, and at mile 234.4.

DRAINAGE AREA.--8,632 mi^2.

PERIOD OF RECORD.--October 1962 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1971 to September 1989 (discontinued).
WATER TEMPERATURE: October 1962 to September 1989 (discontinued).

REVISED RECORDS.--WDR AL-84-1: Drainage area.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1975, 1977-88): Maximum, 233 microsiemens, Aug. 28, 1977; minimum, 28 microsiemens, Apr. 16, 1979.
WATER TEMPERATURE: Maximum (water years 1962-69, 1971-79, 1981-88), 35.5°C, July 25, 1972; minimum, 0°C, Dec. 31, 1983, Jan. 1, 4, 1984.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 190 microsiemens, Nov. 6; minimum, 57 microsiemens, July 11.
WATER TEMPERATURE: Maximum, 30.8°C, Aug. 5, 6; minimum, 5.6°C, Feb. 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMPLING DEPTH (FEET)	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
OCT												
12...	0945	--	--	E1000	121	125	7.40	20.0	16	766	9.2	101
NOV												
16...	0930	--	--	E6000	150	151	7.60	17.0	8.5	758	9.5	99
DEC												
07...	0825	--	--	E5900	95	100	7.20	10.0	23	762	12.4	110
JAN												
10...	1030	--	--	E32000	110	114	7.30	9.0	46	769	12.2	105
10...	1100	16.0	--	E32000	--	--	--	--	--	--	--	--
10...	1110	32.0	--	E32000	--	--	--	--	--	--	--	--
10...	1120	48.0	--	E32000	--	--	--	--	--	--	--	--
10...	1125	64.0	--	E32000	--	--	--	--	--	--	--	--
10...	1130	80.0	--	E32000	--	--	--	--	--	--	--	--
17...	1235	16.0	--	104000	--	--	--	--	--	--	--	--
17...	1250	32.0	--	104000	--	--	--	--	--	--	--	--
17...	1300	48.0	--	104000	--	--	--	--	--	--	--	--
17...	1310	64.0	--	104000	--	--	--	--	--	--	--	--
17...	1320	80.0	--	104000	--	--	--	--	--	--	--	--
18...	0810	16.0	--	107000	--	--	--	--	--	--	--	--
18...	0820	32.0	--	107000	--	--	--	--	--	--	--	--
18...	0830	48.0	--	107000	--	--	--	--	--	--	--	--
18...	0840	64.0	--	107000	--	--	--	--	--	--	--	--
18...	0850	80.0	--	107000	--	--	--	--	--	--	--	--
20...	1400	16.0	--	54000	--	--	--	--	--	--	--	--
20...	1410	32.0	--	54000	--	--	--	--	--	--	--	--
20...	1415	48.0	--	54000	--	--	--	--	--	--	--	--
20...	1425	64.0	--	54000	--	--	--	--	--	--	--	--
20...	1435	80.0	--	54000	--	--	--	--	--	--	--	--
21...	0900	16.0	--	40000	--	--	--	--	--	--	--	--
21...	0905	32.0	--	40000	--	--	--	--	--	--	--	--
21...	0910	48.0	--	40000	--	--	--	--	--	--	--	--
21...	0920	64.0	--	40000	--	--	--	--	--	--	--	--
21...	0930	80.0	--	40000	--	--	--	--	--	--	--	--
MAR												
01...	1400	--	--	E74000	102	104	7.30	8.0	140	761	11.6	98
01...	1500	16.0	--	E75000	--	--	--	--	--	--	--	--
01...	1515	32.0	--	E75000	--	--	--	--	--	--	--	--
01...	1520	48.0	--	E75000	--	--	--	--	--	--	--	--
01...	1530	64.0	--	E75000	--	--	--	--	--	--	--	--
01...	1540	80.0	--	E75000	--	--	--	--	--	--	--	--
15...	1000	--	--	E14500	72	75	7.20	13.5	27	760	10.8	104
APR												
17...	1015	--	--	E5400	79	79	7.50	15.0	17	763	10.8	107
MAY												
09...	1000	--	--	E21500	124	124	7.80	20.0	25	753	8.6	96
JUN												
07...	1300	--	--	E27600	127	129	7.50	26.0	42	752	8.1	102
JUL												
11...	1000	--	--	E15400	100	103	7.50	30.0	31	765	6.8	90
AUG												
09...	1215	--	--	E1700	111	115	7.10	29.0	19	762	7.4	96
09...	1216	--	--	E1700	111	--	7.20	29.0	--	762	6.9	90
09...	1217	--	5.0	E1700	111	--	7.10	29.0	--	--	6.9	--
09...	1218	--	10.0	E1700	110	--	7.00	28.5	--	--	6.9	--
09...	1219	--	15.0	E1700	110	--	7.00	28.5	--	--	6.2	--
SEP												
13...	1000	--	--	E500	136	139	7.40	29.5	7.0	759	7.5	99

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT 12...	12	1	47	12	16	1.7	5.4	19	0.4	2.5	0	43
NOV 16...	130	120	56	17	19	2.0	5.7	17	.3	2.6	0	44
DEC 07...	11	11	39	11	13	1.6	3.2	14	.2	2.3	0	34
JAN 10...	>600	3400	48	15	17	1.4	3.2	12	.2	2.0	41	0
MAR 01...	4200	8800	44	13	16	1.0	2.3	10	.2	1.5	0	38
15...	49	K17	28	8	9.3	1.2	2.3	14	.2	1.3	0	25
APR 17...	27	15	33	10	11	1.4	2.5	13	.2	1.3	0	27
MAY 09...	120	59	48	9	17	1.4	3.7	14	.2	1.9	0	46
JUN 07...	K30	470	53	12	19	1.4	3.8	13	.2	1.9	0	50
JUL 11...	140	750	43	7	15	1.3	2.7	12	.2	1.7	0	46
AUG 09...	K15	K19	43	6	15	1.4	3.0	13	.2	1.7	0	45
SEP 13...	K19	30	52	12	18	1.6	4.9	16	.3	2.0	0	51

DATE	ALKA-LINITY AT DIS TOT IT FIELD MG/L AS CACO3	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
OCT 12...	35	7.60	35	15	7.2	0.10	5.9	90	76	0.12	0	0.210
NOV 16...	36	8.00	39	16	11	.10	4.6	84	85	.11	0	.150
DEC 07...	28	7.50	28	16	4.7	<.10	7.0	78	65	.11	0	.090
JAN 10...	34	8.00	33	17	5.7	.10	7.3	112	74	.15	0	.110
MAR 01...	31	7.60	31	14	3.8	.10	5.2	79	64	.11	0	.170
15...	20	7.20	20	13	3.5	.10	5.5	53	48	.07	0	--
APR 17...	22	7.60	23	7.7	3.3	.10	6.6	62	48	.08	0	--
MAY 09...	37	7.70	39	10	5.4	.10	5.6	139	68	.19	0	--
JUN 07...	41	7.70	41	9.0	6.7	.10	5.9	77	74	.10	0	.340
JUL 11...	38	7.80	36	6.0	3.0	.10	7.6	67	60	.09	0	--
AUG 09...	37	7.50	37	7.0	5.3	.10	6.9	73	64	.10	0	--
SEP 13...	42	7.50	40	9.0	8.6	.10	4.4	90	73	.12	0	--

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)
OCT 12...	--	0.020	0.230	0.050	0.040	0.65	0.70	0.080	0.040	0.020	0.08
NOV 16...	0.66	<.010	.160	.020	.020	.68	.70	.070	.030	.010	.07
DEC 07...	.40	.010	<.100	.070	.050	.53	.60	.080	.030	.010	.08
JAN 10...	--	.020	.130	.070	.090	.73	.80	.120	.070	.050	.12
MAR 01...	--	.010	.180	.080	.060	.82	.90	.250	.030	.020	.25
15...	--	<.010	<.100	.040	.020	.36	.40	.040	.010	.020	.04
APR 17...	--	<.010	<.100	.030	.030	.27	.30	.060	.020	<.010	.06
MAY 09...	--	<.010	<.100	.070	<.010	.63	.70	.110	--	<.010	.11
JUN 07...	--	.010	.350	.080	.060	.82	.90	.080	.040	.030	.08
JUL 11...	--	<.010	.110	.040	.040	.36	.40	.070	.040	.030	.07
AUG 09...	--	<.010	.140	.060	.060	.34	.40	.060	.020	.020	.06
SEP 13...	--	.030	<.100	.020	.030	.28	.30	.050	.010	<.010	.05

DATE	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT 12...	0.02	30	1	24	0.9	<1	1	<3	2	110	<5
NOV 16...	.02	--	--	--	--	--	--	--	--	--	--
DEC 07...	.02	--	--	--	--	--	--	--	--	--	--
JAN 10...	.02	--	--	--	--	--	--	--	--	--	--
MAR 01...	.01	100	<1	20	<.5	3	<1	<3	15	180	<5
15...	.0	--	--	--	--	--	--	--	--	--	--
APR 17...	.02	100	<1	30	<.5	<1	<1	<3	2	470	<5
JUN 07...	.01	--	--	--	--	--	--	--	--	--	--
JUL 11...	.01	--	--	--	--	--	--	--	--	--	--
AUG 09...	.0	10	<1	21	<.5	<1	<1	<3	1	140	<1
SEP 13...	.01	--	--	--	--	--	--	--	--	--	--

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT										
12...	<4	<1	<.1	<10	2	<1	<1.0	100	<6	11
MAR										
01...	<4	41	.1	<10	3	<1	<1.0	100	<6	23
APR										
17...	<4	45	<.1	<10	5	<1	<1.0	72	<6	12
AUG										
09...	<4	3	.4	<10	1	<1	<1.0	100	<6	<3

DATE	TIME	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
OCT													
12...	0945	19	51.0	--	--	--	--	--	--	--	--	--	--
NOV													
16...	0930	27	437	94	--	--	--	--	--	--	--	--	--
DEC													
07...	0825	20	319	100	--	--	--	--	--	--	--	--	--
JAN													
10...	1030	79	6830	94	--	--	--	--	--	--	--	--	--
10...	1100	77	6650	--	--	--	--	--	--	--	--	--	--
10...	1110	75	6480	--	--	--	--	--	--	--	--	--	--
10...	1120	83	7170	--	--	--	--	--	--	--	--	--	--
10...	1125	88	7600	--	--	--	--	--	--	--	--	--	--
10...	1130	84	7260	--	--	--	--	--	--	--	--	--	--
10...	1200	--	--	--	0	<1	3	14	16	20	28	47	93
10...	1210	--	--	--	0	<1	3	28	42	45	52	71	95
10...	1220	--	--	--	<1	<1	16	98	100	100	100	100	100
17...	1235	264	74100	--	--	--	--	--	--	--	--	--	--
17...	1250	322	90400	--	--	--	--	--	--	--	--	--	--
17...	1300	270	75800	--	--	--	--	--	--	--	--	--	--
17...	1310	275	77200	--	--	--	--	--	--	--	--	--	--
17...	1320	344	96600	--	--	--	--	--	--	--	--	--	--
18...	0810	216	62400	--	--	--	--	--	--	--	--	--	--
18...	0820	217	62700	--	--	--	--	--	--	--	--	--	--
18...	0830	204	58900	--	--	--	--	--	--	--	--	--	--
18...	0840	207	59800	--	--	--	--	--	--	--	--	--	--
18...	0850	206	59500	--	--	--	--	--	--	--	--	--	--
20...	1400	52	7580	--	--	--	--	--	--	--	--	--	--
20...	1410	48	7000	--	--	--	--	--	--	--	--	--	--
20...	1415	54	7870	--	--	--	--	--	--	--	--	--	--
20...	1425	58	8460	--	--	--	--	--	--	--	--	--	--
20...	1435	48	7000	--	--	--	--	--	--	--	--	--	--
21...	0900	49	5290	--	--	--	--	--	--	--	--	--	--
21...	0905	54	5830	--	--	--	--	--	--	--	--	--	--
21...	0910	54	5830	--	--	--	--	--	--	--	--	--	--
21...	0920	60	6480	--	--	--	--	--	--	--	--	--	--
21...	0930	60	6480	--	--	--	--	--	--	--	--	--	--
21...	1000	--	--	--	0	0	5	14	16	17	20	29	75
21...	1015	--	--	--	0	0	7	17	18	20	29	67	98
21...	1030	--	--	--	0	1	19	89	99	100	100	100	100
MAR													
01...	1400	496	99100	60	--	--	--	--	--	--	--	--	--
01...	1500	403	81600	--	--	--	--	--	--	--	--	--	--
01...	1515	405	82000	--	--	--	--	--	--	--	--	--	--
01...	1520	363	73500	--	--	--	--	--	--	--	--	--	--
01...	1530	390	79000	--	--	--	--	--	--	--	--	--	--
01...	1540	334	76600	--	--	--	--	--	--	--	--	--	--
15...	1000	21	822	93	--	--	--	--	--	--	--	--	--
APR													
17...	1015	28	408	84	--	--	--	--	--	--	--	--	--
MAY													
09...	1000	32	1860	92	--	--	--	--	--	--	--	--	--
JUN													
07...	1300	114	8500	76	--	--	--	--	--	--	--	--	--
JUL													
11...	1000	50	2080	--	--	--	--	--	--	--	--	--	--
AUG													
09...	1215	27	124	94	--	--	--	--	--	--	--	--	--
SEP													
13...	1000	12	16.0	97	--	--	--	--	--	--	--	--	--

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	187	164	174	112	100	107	112	108	110	143	126	136
2	177	148	169	114	99	106	111	104	107	125	114	119
3	156	143	147	116	105	111	106	101	104	113	108	110
4	160	145	154	121	102	107	109	96	101	109	99	104
5	155	146	150	177	105	135	100	94	97	101	94	98
6	167	153	159	190	144	163	123	91	99	96	92	94
7	166	150	159	158	123	137	116	88	94	97	90	94
8	161	155	160	143	122	130	99	84	91	94	78	85
9	156	151	154	144	128	136	124	79	90	102	79	85
10	157	151	155	143	128	133	131	81	91	114	99	108
11	156	147	151	138	129	133	96	80	89	116	110	113
12	149	121	132	144	134	137	112	81	88	121	109	115
13	126	120	123	189	136	153	130	80	93	113	106	110
14	124	120	122	181	140	157	116	83	92	109	93	101
15	122	118	120	160	135	149	119	81	91	93	80	87
16	124	119	122	165	143	154	107	82	90	80	71	76
17	121	117	119	176	140	148	131	85	97	72	67	69
18	124	115	118	180	144	149	133	87	94	67	64	56
19	123	114	116	145	127	138	130	88	98	66	63	64
20	123	115	119	152	141	146	118	84	90	70	65	67
21	153	115	131	150	132	144	112	84	94	82	69	75
22	166	131	147	131	126	128	96	89	93	92	81	86
23	152	120	138	149	131	141	162	88	109	93	69	84
24	137	114	122	148	138	144	119	106	112	79	70	75
25	159	133	144	138	125	131	124	111	116	78	67	74
26	144	119	130	125	111	119	133	113	121	86	73	78
27	127	117	120	141	114	124	130	118	127	86	69	75
28	133	110	120	124	98	107	136	128	131	90	73	78
29	115	106	110	99	94	96	152	133	141	90	72	80
30	116	104	109	111	98	105	152	140	145	113	74	92
31	118	101	109	---	---	---	145	139	142	108	97	101
MONTH	187	101	136	190	94	132	162	79	104	143	63	90

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	103	95	99	110	91	101	118	106	110	107	91	95
2	109	100	103	96	80	89	122	118	120	118	94	106
3	127	109	117	80	66	73	126	114	119	116	94	103
4	123	118	121	77	66	69	117	103	111	107	95	101
5	129	115	122	89	78	81	125	103	113	105	94	99
6	119	113	116	97	79	86	121	109	116	136	96	112
7	123	116	120	89	82	86	109	98	103	147	134	140
8	119	114	116	82	76	79	98	89	92	135	127	131
9	117	112	114	76	68	72	105	87	96	127	116	123
10	119	106	112	74	69	70	98	91	96	115	104	108
11	112	104	108	80	73	77	93	89	91	111	101	106
12	103	100	102	82	77	79	92	89	91	101	97	98
13	119	103	107	82	74	78	99	90	95	99	97	98
14	103	97	101	80	72	76	98	80	91	120	95	100
15	100	87	92	81	72	76	88	81	85	119	106	110
16	101	90	94	88	76	80	89	81	86	120	112	116
17	104	99	101	85	78	81	104	78	86	112	102	107
18	114	100	106	87	78	82	99	76	89	106	98	102
19	123	115	121	98	77	85	104	78	91	125	106	116
20	134	120	127	104	77	88	128	77	91	122	106	111
21	152	132	141	122	75	102	116	82	87	127	117	120
22	138	120	129	109	101	106	100	84	91	124	116	121
23	118	101	111	110	106	108	115	85	91	142	123	132
24	100	91	96	128	107	115	128	84	96	153	135	142
25	91	87	89	128	122	125	114	83	94	148	131	137
26	88	86	87	122	117	119	104	85	96	156	139	147
27	87	85	86	121	111	117	119	85	97	165	146	157
28	99	83	89	131	106	114	112	87	96	174	149	163
29	---	---	---	138	104	112	125	91	103	166	143	155
30	---	---	---	129	112	118	112	91	98	171	143	154
31	---	---	---	115	107	109	---	---	---	165	136	150
MONTH	152	83	108	138	66	92	128	76	97	174	91	121

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	158	142	150	130	97	114	115	80	89	146	130	135
2	160	134	142	116	96	108	83	77	79	139	129	133
3	165	142	154	118	98	110	115	85	93	139	127	132
4	158	142	152	104	85	95	144	110	119	135	129	132
5	146	132	140	122	88	98	135	108	114	135	128	132
6	133	116	126	132	87	110	132	112	120	137	127	131
7	137	117	127	120	81	95	115	109	112	137	129	134
8	147	136	141	95	79	88	118	103	113	134	128	130
9	149	132	141	113	81	91	111	100	105	131	129	130
10	131	115	121	114	78	92	119	102	105	135	124	129
11	121	112	116	122	57	96	115	105	108	137	130	133
12	132	112	118	147	97	112	118	105	110	146	133	136
13	111	100	107	109	102	104	128	105	112	147	133	138
14	111	97	100	108	102	104	114	108	112	---	---	---
15	129	110	119	114	108	111	115	108	111	---	---	---
16	132	127	130	138	105	114	124	108	112	---	---	---
17	132	124	129	159	107	130	135	109	118	---	---	---
18	127	122	125	124	113	120	118	113	115	---	---	---
19	121	114	117	179	109	130	145	115	123	---	---	---
20	123	112	117	181	104	130	143	116	121	---	---	---
21	145	117	130	163	97	111	141	121	130	---	---	---
22	128	117	122	167	99	121	136	117	124	---	---	---
23	122	106	114	166	97	114	138	120	125	---	---	---
24	114	96	109	125	100	109	134	125	128	---	---	---
25	119	95	103	141	107	120	126	121	123	---	---	---
26	119	113	116	167	95	123	132	120	125	---	---	---
27	127	114	121	161	93	112	137	124	127	---	---	---
28	125	114	119	111	90	98	135	126	128	---	---	---
29	123	93	108	130	86	100	139	128	131	---	---	---
30	132	94	110	120	85	94	134	130	132	---	---	---
31	---	---	---	103	85	91	137	132	135	---	---	---
MONTH	165	93	124	181	57	108	145	77	116	---	---	---

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.2	19.7	20.3	---	---	---	12.6	12.0	12.4	10.8	10.0	10.3
2	25.2	22.4	24.6	---	---	---	12.0	11.4	11.8	9.9	9.7	9.8
3	24.8	22.2	23.4	---	---	---	11.5	11.1	11.3	10.2	9.8	10.0
4	23.8	23.3	23.6	---	---	---	11.2	10.7	11.0	10.0	9.9	10.0
5	23.2	22.3	22.8	---	---	---	10.8	10.4	10.7	9.9	9.7	9.8
6	22.3	21.7	22.0	---	---	---	10.6	9.4	10.2	10.3	9.8	10.1
7	21.8	20.7	21.4	---	---	---	10.8	10.1	10.4	10.9	10.2	10.5
8	21.3	20.1	20.9	---	---	---	10.6	10.1	10.3	11.0	10.8	10.9
9	20.8	20.4	20.6	---	---	---	10.4	9.7	10.2	10.9	10.6	10.9
10	20.8	20.2	20.5	17.2	16.0	16.9	10.0	9.4	9.9	10.6	9.9	10.3
11	20.5	17.3	19.8	---	---	---	9.7	9.2	9.6	10.1	9.7	9.9
12	20.6	18.9	19.9	17.2	16.7	16.9	9.6	8.9	9.4	10.8	10.1	10.5
13	20.0	18.9	19.5	16.9	15.4	16.5	9.6	8.3	9.1	11.5	10.8	11.2
14	19.6	18.7	19.3	16.7	15.3	16.2	9.4	8.8	9.1	11.6	11.3	11.6
15	19.5	18.2	19.1	17.0	16.3	16.7	9.5	8.9	9.4	11.3	10.5	10.9
16	19.4	17.8	18.9	17.3	16.8	17.0	9.4	8.6	9.1	10.4	10.0	10.2
17	20.2	18.3	19.4	16.9	16.1	16.7	8.7	7.7	8.5	9.9	9.5	9.7
18	20.2	18.1	19.4	16.7	15.5	16.3	8.5	7.2	8.3	9.5	9.2	9.4
19	19.7	18.2	19.2	16.8	16.4	16.6	8.6	7.6	8.1	9.3	9.1	9.2
20	19.0	17.5	18.4	17.2	16.5	16.8	9.0	8.0	8.6	9.3	9.1	9.2
21	18.7	17.4	18.2	16.5	16.1	16.3	9.0	8.3	8.8	9.2	8.9	9.1
22	---	---	---	16.1	15.2	15.6	9.3	8.9	9.1	9.0	8.8	8.9
23	---	---	---	15.2	14.6	14.9	10.7	9.4	9.7	9.0	8.6	8.9
24	---	---	---	14.7	14.4	14.6	10.8	9.8	10.3	9.1	8.8	9.0
25	---	---	---	14.4	14.1	14.3	10.6	10.3	10.5	9.4	9.0	9.2
26	---	---	---	14.4	14.1	14.3	11.0	10.4	10.7	9.7	9.3	9.5
27	---	---	---	14.6	14.3	14.5	11.1	10.6	10.8	10.2	9.7	10.0
28	---	---	---	14.3	13.4	13.8	11.4	11.1	11.3	10.5	9.9	10.2
29	---	---	---	13.4	12.8	13.1	11.4	11.1	11.3	10.6	10.2	10.5
30	---	---	---	12.9	12.6	12.8	11.4	11.0	11.2	11.5	10.6	11.0
31	---	---	---	---	---	---	11.1	10.7	10.9	11.8	11.4	11.7
MONTH	---	---	---	---	---	---	12.6	7.2	10.1	11.8	8.6	10.1

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.3	11.7	12.0	7.8	7.6	7.8	17.2	16.8	17.0	23.3	22.7	23.0
2	12.9	12.3	12.6	8.3	7.8	8.1	17.2	16.8	17.0	23.6	22.7	23.1
3	13.3	12.9	13.1	8.8	8.3	8.6	17.3	17.1	17.2	23.2	22.8	23.0
4	12.9	12.6	12.8	9.5	8.8	9.1	17.5	17.2	17.4	22.9	22.1	22.5
5	12.5	12.0	12.3	11.5	9.6	10.4	17.4	17.0	17.3	22.3	21.8	22.1
6	12.0	9.9	11.3	11.8	11.1	11.5	17.0	16.5	16.7	21.8	20.8	21.3
7	9.8	7.5	8.6	11.1	10.1	10.7	16.4	16.0	16.2	20.7	20.0	20.3
8	7.5	6.8	7.2	10.0	9.0	9.5	15.9	15.5	15.7	20.1	19.7	19.9
9	6.8	6.1	6.6	9.0	8.4	8.6	15.5	14.6	15.1	20.1	19.8	20.0
10	6.2	5.6	6.0	8.9	8.3	8.6	14.6	13.7	14.2	19.9	19.6	19.8
11	6.2	5.7	5.9	9.7	8.9	9.3	13.8	13.3	13.6	19.9	19.4	19.7
12	6.5	5.9	6.2	10.8	9.7	10.2	13.6	13.2	13.4	19.9	19.4	19.6
13	7.5	6.4	6.9	11.9	10.8	11.3	13.9	13.2	13.6	19.7	19.3	19.6
14	8.6	7.3	7.9	13.2	11.9	12.5	14.2	13.8	14.0	19.6	18.5	19.2
15	10.0	8.6	9.2	14.3	13.3	13.9	14.6	14.1	14.4	19.0	18.7	18.9
16	11.4	10.0	10.7	15.2	14.3	14.8	15.3	14.4	14.8	19.0	18.6	18.8
17	11.9	11.4	11.7	15.9	15.1	15.5	15.9	15.0	15.5	19.6	18.8	19.2
18	11.9	11.6	11.8	16.6	15.7	16.2	17.0	15.7	16.3	20.2	19.2	19.7
19	12.1	11.7	11.9	17.0	16.4	16.7	17.4	16.3	16.9	20.7	19.4	20.4
20	11.8	11.0	11.4	17.5	16.7	17.1	18.3	17.0	17.6	21.5	20.7	21.1
21	11.3	10.9	11.1	17.3	16.6	17.1	18.4	17.7	18.0	22.0	21.3	21.7
22	11.0	10.6	10.8	16.6	15.1	15.9	19.0	18.0	18.5	22.7	22.1	22.4
23	10.6	9.4	10.1	15.1	14.2	14.7	19.6	18.5	19.1	23.2	22.4	22.8
24	9.3	8.1	8.7	14.2	13.2	13.7	21.4	19.2	19.9	23.7	22.9	23.4
25	8.1	7.3	7.6	13.3	13.1	13.2	21.4	20.0	20.5	24.5	23.4	24.0
26	7.2	6.9	7.1	13.5	13.1	13.3	21.8	20.7	21.2	25.1	24.0	24.6
27	7.1	6.8	7.0	14.2	13.3	13.8	22.3	21.2	21.8	25.9	24.2	25.1
28	7.6	7.1	7.3	15.0	14.0	14.6	22.6	21.6	22.1	26.4	24.8	25.7
29	---	---	---	16.2	14.9	15.4	22.6	22.1	22.4	26.6	25.3	26.0
30	---	---	---	16.9	16.0	16.4	23.2	22.2	22.7	27.0	25.7	26.4
31	---	---	---	17.1	16.9	17.0	---	---	---	27.5	26.3	26.7
MONTH	13.3	5.6	9.5	17.5	7.6	12.8	23.2	13.2	17.3	27.5	18.5	21.9

		JUNE			JULY			AUGUST			SEPTEMBER	
1	27.8	26.7	27.1	27.6	26.2	27.2	30.0	29.4	29.7	---	---	---
2	28.1	27.2	27.7	27.2	26.5	26.8	30.1	29.5	29.8	---	---	---
3	27.8	26.8	27.4	26.4	26.0	26.2	30.3	29.6	29.9	---	---	---
4	26.7	25.9	26.3	26.1	25.9	26.1	30.3	29.0	29.6	---	---	---
5	27.0	26.2	26.6	26.2	26.0	26.1	30.8	29.4	29.9	---	---	---
6	26.4	26.1	26.4	26.3	26.1	26.2	30.8	29.2	30.2	---	---	---
7	26.0	25.5	25.8	26.8	26.2	26.5	30.3	29.9	30.2	---	---	---
8	25.9	24.7	25.4	27.2	26.7	27.0	30.0	29.2	29.6	---	---	---
9	24.8	23.7	24.1	27.4	27.0	27.2	29.5	28.2	28.8	---	---	---
10	23.8	23.5	23.7	27.4	26.9	27.2	29.0	27.1	28.3	---	---	---
11	24.2	23.7	24.0	27.4	26.9	27.2	28.8	27.7	28.2	---	---	---
12	24.8	24.1	24.5	27.5	27.0	27.2	28.5	27.7	28.1	---	---	---
13	25.5	24.8	25.1	27.7	27.3	27.5	28.8	27.0	28.2	---	---	---
14	25.9	25.4	25.6	28.2	27.7	27.9	28.7	27.6	28.2	---	---	---
15	25.7	25.0	25.3	28.9	28.2	28.6	28.9	27.8	28.3	---	---	---
16	25.0	24.1	24.5	28.9	28.6	28.8	28.6	27.6	28.2	---	---	---
17	24.1	23.7	24.0	28.9	28.5	28.8	28.2	27.2	27.8	---	---	---
18	24.3	23.9	24.1	28.7	28.2	28.5	28.3	27.4	27.9	---	---	---
19	24.6	24.1	24.4	28.1	27.9	28.0	28.1	26.4	27.4	---	---	---
20	24.9	24.6	24.8	27.8	27.5	27.7	28.6	27.0	28.0	---	---	---
21	25.6	24.9	25.3	27.8	27.4	27.6	29.2	27.6	28.2	---	---	---
22	26.1	25.5	25.8	27.5	26.4	26.9	28.9	28.3	28.7	---	---	---
23	26.2	25.8	26.0	27.5	26.1	26.9	29.5	28.5	29.0	---	---	---
24	26.4	25.8	26.1	27.4	26.9	27.2	29.5	28.6	29.0	---	---	---
25	26.5	26.0	26.3	27.7	26.9	27.3	---	---	---	---	---	---
26	26.9	26.3	26.6	28.4	27.5	28.0	---	---	---	---	---	---
27	26.9	26.1	26.7	29.0	28.0	28.4	---	---	---	---	---	---
28	27.4	26.6	27.0	29.2	28.4	28.8	---	---	---	---	---	---
29	27.6	27.1	27.4	29.7	28.8	29.2	---	---	---	---	---	---
30	28.2	27.0	27.7	30.2	29.2	29.6	---	---	---	---	---	---
31	---	---	---	30.2	29.3	29.7	---	---	---	---	---	---
MONTH	28.2	23.5	25.7	30.2	25.9	27.6	---	---	---	---	---	---

02449245 BRUSH CREEK NEAR EUTAW, AL

LOCATION.--Lat 32°49'51", long 87°58'56", in N½ sec. 3, T. 21 N., R. 1 E., Greene County, Hydrologic Unit 03160106, near right bank on downstream side of county highway bridge, 1.3 mi downstream from Pippan Creek, 2.2 mi upstream from Dry Creek, 5.5 mi west of Eutaw, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--43.2 mi^2.

PERIOD OF RECORD.--October 1970 to May 1975 (peak discharge only). June 1975 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 105.92 ft above National Geodetic Vertical Datum of 1929. Oct. 5, 1970, to May 31, 1975, crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: Feb. 10 to 19, 25 to 27, Apr. 25 to May 4, May 9, May 11 to 14, May 27 to June 4, June 13, June 22, June 27 to 30, July 11 to 19. Records good except those for periods of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--14 years, 61.9 ft^3/s, 19.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,560 ft^3/s, Apr. 13, 1979, gage height, 22.68 ft, from rating curve extended above 4,600 ft^3/s; minimum daily discharge, 0.02 ft^3/s, June 21, 22, 25, 28, 29, Oct. 16, 17, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 4	1815	*1,440	*14.42				

Minimum daily discharge, 0.02 ft^3/s, Oct. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	.55	15	248	24	81	74	11	20	191	12	1.0
2	102	.72	12	85	22	90	59	10	18	587	10	.86
3	14	.89	10	58	22	69	52	9.5	28	199	11	.75
4	4.2	31	9.7	41	24	532	79	25	77	242	9.1	1.9
5	2.1	52	9.1	32	28	449	180	62	142	483	6.6	.91
6	.85	13	8.4	29	68	151	71	40	162	185	5.8	.54
7	.45	5.8	7.6	26	121	90	55	27	53	100	4.5	.50
8	.32	7.0	7.3	27	46	68	49	20	155	93	4.6	.48
9	.21	6.5	6.7	107	32	56	379	18	99	219	4.6	.47
10	.16	7.3	6.4	173	26	49	272	22	49	142	3.6	.38
11	.12	9.5	6.9	100	22	44	119	20	36	90	3.1	8.8
12	.09	12	9.4	134	18	40	78	18	32	120	2.7	2.4
13	.08	89	7.5	257	16	37	60	16	28	215	2.5	6.9
14	.06	20	6.3	150	14	35	51	70	86	80	2.4	2.4
15	.05	12	6.5	179	13	32	51	86	307	60	2.2	1.6
16	.02	8.9	9.6	87	20	30	46	34	129	42	5.8	1.2
17	.02	8.4	9.2	61	18	28	39	27	63	30	21	.94
18	.09	6.2	7.8	49	16	27	34	21	48	24	10	.77
19	.27	5.0	7.4	49	18	25	31	86	47	21	6.9	.58
20	2.9	54	6.0	67	21	43	30	35	42	24	5.3	.46
21	23	24	5.8	43	210	383	28	34	37	21	4.2	.43
22	4.7	12	5.9	37	63	198	26	24	33	17	3.0	.37
23	1.5	8.9	166	33	38	179	24	217	56	16	2.5	.35
24	.92	6.6	57	31	30	98	22	163	39	19	2.1	.33
25	.62	5.1	29	28	26	69	20	56	45	65	1.8	.53
26	.33	53	19	26	22	58	18	35	36	26	1.6	.92
27	.30	213	16	27	18	49	16	28	32	18	1.3	.96
28	.19	73	26	26	159	43	14	24	36	15	1.3	1.7
29	.15	30	24	25	---	243	13	22	32	12	1.2	4.3
30	.11	20	64	28	---	448	12	20	29	10	1.2	46
31	.27	---	525	28	---	121	---	18	---	14	1.1	---
TOTAL	181.08	795.36	1106.5	2291	1155	3865	2002	1298.5	1996	3380	155.0	89.73
MEAN	5.84	26.5	35.7	73.9	41.2	125	66.7	41.9	66.5	109	5.00	2.99
MAX	102	213	525	257	210	532	379	217	307	587	21	46
MIN	.02	.55	5.8	25	13	25	12	9.5	18	10	1.1	.33
CFSM	.14	.61	.83	1.71	.95	2.89	1.54	.97	1.54	2.52	.12	.07
IN.	.16	.68	.95	1.97	.99	3.33	1.72	1.12	1.72	2.91	.13	.08

CAL YR 1988 TOTAL 4033.75 MEAN 11.0 MAX 525 MIN .02 CFSM .26 IN. 3.47
WTR YR 1989 TOTAL 18315.17 MEAN 50.2 MAX 587 MIN .02 CFSM 1.16 IN. 15.77

02450000 MULBERRY FORK NEAR GARDEN CITY, AL

LOCATION.--Lat 33°59'42", long 86°44'56", in NE¼ sec. 16, T. 12 S., R. 2 W., Blount County, Hydrologic Unit 03160109, on left bank near downstream side of bridge on U.S. Highway 31 (old), 1,000 ft downstream from Louisville & Nashville Railroad bridge, 1 mi southwest of Garden City, 5.5 mi downstream from Mud Creek, and at mile 79.2.

DRAINAGE AREA.--365 mi².

PERIOD OF RECORD.--June 1928 to current year. Monthly discharge only for period April to June 1932 published in WSP 1304. Prior to 1941, published as "Mulberry Fork of Black Warrior River."

REVISED RECORD.--WDR AL-79-2: Drainage area. WDR AL-82-1: 1974-80 (P).

GAGE.--Water-stage recorder. Datum of gage is 380.54 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 5, 1939, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 6-8, Nov. 23-25, Jan. 12-15, Jan. 26 to Feb. 15. Records good except those for periods of estimated record, which are fair. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--61 years, 672 ft³/s, 25.00 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,100 ft³/s, Jan. 3, 1982, gage height, 22.45 ft; maximum gage height, 24.0 ft, Feb. 4, 1936, from floodmarks; minimum observed, 3 ft³/s, Sept. 28-30, Oct. 1, 3-6, 1931, gage height, 1.88 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 13,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 21	0900	14,100	12.50	Apr. 4	1900	17,600	13.84
Feb. 28	0800	*22,500	*15.42	July 2	1700	18,000	13.99

Minimum discharge, 54 ft³/s, Aug. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	643	104	981	4680	620	4480	1180	206	78	969	379	165
2	1790	106	786	2650	560	2960	972	196	79	9840	254	197
3	1100	98	672	2290	500	2310	843	168	90	6320	223	165
4	755	154	596	1760	510	2270	7070	159	201	3770	205	120
5	543	364	516	1340	700	5210	5740	782	709	2560	170	100
6	400	289	467	1290	1300	7340	3070	918	372	1950	153	84
7	320	212	430	1120	2600	3330	2470	404	264	1400	656	73
8	288	185	393	2220	2200	2450	2000	292	206	1110	268	69
9	254	176	359	2540	1600	1930	1790	256	277	1170	187	67
10	231	169	336	3770	1300	1520	1330	305	208	1120	156	78
11	207	165	312	5510	1100	1260	1100	233	165	919	140	238
12	181	155	287	8000	950	1060	942	199	136	1060	127	198
13	155	177	267	7000	800	907	806	180	326	1410	114	138
14	145	188	251	5500	720	794	691	180	538	1360	104	122
15	130	167	236	4500	660	689	682	232	3680	760	98	122
16	117	160	216	3340	640	620	609	202	2180	2780	92	126
17	109	168	205	2540	622	544	515	167	1160	2800	90	107
18	103	162	196	2040	634	490	454	145	734	1430	114	92
19	98	159	188	1640	997	436	405	136	4120	1150	86	79
20	96	1970	186	1350	1350	472	378	141	4080	1160	80	73
21	109	1270	185	1090	7840	2570	342	223	3350	800	71	69
22	120	835	195	934	3540	1700	306	154	4150	619	66	70
23	104	720	500	816	2430	1870	275	608	2990	529	66	98
24	90	620	633	718	1800	2000	251	299	1890	452	64	99
25	79	530	542	635	1430	1530	232	193	1240	396	88	82
26	75	482	457	570	1220	1240	213	153	875	342	76	82
27	73	4370	409	540	4360	1040	200	127	659	291	62	85
28	100	2590	468	520	15000	882	186	112	819	257	59	87
29	198	1690	570	500	---	834	172	102	768	327	55	768
30	132	1270	678	570	---	2330	167	92	637	241	215	2060
31	109	---	4180	640	---	1610	---	84	---	1030	288	---
TOTAL	8854	19705	16697	72613	57983	58678	35391	7648	36981	50322	4806	5913
MEAN	286	657	539	2342	2071	1893	1180	247	1233	1623	155	197
MAX	1790	4370	4180	8000	15000	7340	7070	918	4150	9840	656	2060
MIN	73	98	185	500	500	436	167	84	78	241	55	67
CFSM	.78	1.80	1.48	6.42	5.67	5.19	3.23	.68	3.38	4.45	.42	.54
IN.	.90	2.01	1.70	7.40	5.91	5.98	3.61	.78	3.77	5.13	.49	.60

CAL YR 1988 TOTAL 147418 MEAN 403 MAX 7590 MIN 13 CFSM 1.10 IN. 15.02
WTR YR 1989 TOTAL 375591 MEAN 1029 MAX 15000 MIN 55 CFSM 2.82 IN. 38.28

02450180 MULBERRY FORK NEAR ARKADELPHIA, AL

LOCATION.--Lat 33°52'00", long 86°44'56", in NE¼ sec. 35, T. 13 S., R. 4 W., Blount County, Hydrologic Unit 03160109, on left bank 200 ft upstream from county road, 4 mi south of Arkadelphia, and at mile 58.6.

DRAINAGE AREA.--487 mi².

PERIOD OF RECORD.--October 1976 to September 1986, October 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 270.23 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 16 to Feb. 15, Apr. 7-11, Apr. 22 to June 1, June 5-9, June 20 to Sept. 20. Records good except those for periods of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--11 years, 875 ft³/s, 24.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,300 ft³/s, Apr. 14, 1979, gage height, 39.11 ft; minimum, 13 ft³/s, Aug. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 13	2100	*18,400	*29.94	Apr. 5	0700	13,000	25.33
Feb. 28	2000	17,800	29.45				

Minimum daily discharge, 65 ft³/s, Aug. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	844	144	1200	5800	740	11500	1550	300	115	1500	430	210
2	1950	137	931	3050	660	3760	1180	280	127	7000	310	250
3	1420	136	811	2940	600	2580	989	240	128	9000	270	200
4	931	151	744	2440	580	2210	4110	230	153	5000	240	150
5	712	599	682	1730	750	4990	10900	1100	1000	3500	210	130
6	569	581	619	1620	2100	8530	4330	1400	600	2600	190	110
7	464	390	565	1520	3300	4430	2800	650	350	2000	820	95
8	393	317	514	1930	2500	2740	2500	450	300	1600	320	90
9	340	285	462	2710	2000	2080	2200	380	486	1700	230	85
10	305	269	427	4050	1600	1700	1800	450	392	1600	190	100
11	277	255	402	5040	1400	1560	1400	350	294	1300	170	300
12	246	243	368	8160	1200	1280	1080	300	239	1600	150	240
13	208	251	343	15500	1000	1050	947	260	230	2000	125	170
14	178	283	320	13500	940	933	872	270	690	1800	130	150
15	162	273	302	6170	820	843	831	350	3360	1200	115	140
16	146	248	277	3840	778	783	836	290	2950	3500	110	150
17	137	242	257	2700	773	731	702	240	1640	3800	100	130
18	126	244	240	2200	744	683	630	210	1020	2000	150	110
19	121	238	227	1800	1020	631	561	190	3190	1400	110	95
20	113	1720	225	1500	1290	596	520	210	6400	1500	100	80
21	128	1920	226	1200	7290	2220	473	330	5000	1000	90	67
22	141	1130	235	1000	5500	2240	440	230	6000	800	80	226
23	139	867	448	910	2660	1890	390	900	4000	650	75	136
24	119	756	865	800	1910	2410	350	450	2500	550	70	128
25	104	679	771	700	1610	1800	330	310	1800	470	110	124
26	94	620	690	650	1470	1580	300	220	1200	400	90	140
27	90	4220	606	610	2840	1290	290	190	920	350	75	113
28	109	3300	592	600	14800	1040	270	160	1200	320	70	215
29	223	2000	719	600	---	934	250	150	1100	400	65	918
30	226	1580	747	680	---	2320	240	130	1000	300	270	1980
31	162	---	3130	800	---	2060	---	120	---	1300	370	---
TOTAL	11177	24078	18945	96750	62875	73394	44071	11340	48384	62140	5835	7032
MEAN	361	803	611	3121	2246	2368	1469	366	1613	2005	188	234
MAX	1950	4220	3130	15500	14800	11500	10900	1400	6400	9000	820	1980
MIN	90	136	225	600	580	596	240	120	115	300	65	67

WTR YR 1989 TOTAL 466021 MEAN 1277 MAX 15500 MIN 65

02450250 SIPSEY FORK NEAR GRAYSON, AL

LOCATION.--Lat 34°17'07", long 87°23'56", in NW¼ sec. 8, T. 9 S., R. 8 W., Winston County, Hydrologic Unit 03160110, Bankhead National Forest, at downstream side of bridge on Cranal Road, 0.5 mi downstream from Borden Creek, 4.5 mi west of Grayson, 14 mi northeast of Haleyville, and 64.1 miles upstream from mouth.

DRAINAGE AREA.--92.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

REVISED RECORDS.--WDR AL-79-2: Drainage Area.

GAGE.--Water-stage recorder. Elevation of gage is 540 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 29, 1984, at site 400 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Water-discharge records good except those effected by beaverdam, Oct. 1 to Nov. 20, which are poor.

AVERAGE DISCHARGE.--23 years, 163 ft³/s, 24.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,300 ft³/s, Mar. 16, 1973, gage height, 44.27 ft; minimum, 0.60 ft³/s, July 17, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 13	0745	4,600	19.88	Mar. 5	2000	*8,500	*27.55
Feb. 28	0500	6,900	24.70	Sept. 30	1645	5,190	21.21

Minimum discharge, 5.3 ft³/s, Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	15	108	802	257	954	236	52	16	84	32	48
2	168	13	81	445	204	570	206	44	19	394	30	28
3	25	13	68	327	172	410	180	38	24	598	28	21
4	12	39	59	245	144	350	685	42	24	665	24	16
5	8.1	120	50	203	188	3670	922	308	57	593	22	14
6	6.3	53	46	194	376	2400	494	318	87	333	23	12
7	5.8	36	44	159	373	798	387	157	71	208	30	12
8	5.5	29	40	547	296	503	307	112	65	155	21	12
9	5.8	25	37	479	250	363	239	94	123	139	18	11
10	6.2	22	35	359	222	282	195	78	78	441	17	12
11	6.5	19	34	453	201	232	165	63	56	660	16	40
12	6.8	19	32	1660	173	198	146	54	47	464	15	102
13	7.0	45	31	3270	155	170	129	50	102	505	14	43
14	7.8	46	31	1250	138	150	116	53	123	616	13	52
15	9.8	38	29	1470	125	132	114	60	826	321	13	90
16	12	35	28	709	110	127	101	48	646	329	13	61
17	15	32	27	450	110	111	89	40	280	323	14	43
18	20	28	27	328	196	104	82	35	161	213	13	31
19	26	166	27	252	366	93	81	33	1350	191	13	24
20	28	1630	27	203	320	104	79	42	931	172	12	19
21	29	365	29	161	1360	157	71	65	433	127	11	17
22	30	179	33	140	694	165	67	47	311	107	10	619
23	30	119	196	125	408	171	62	46	257	91	9.9	1360
24	34	86	495	111	292	179	58	37	175	82	9.7	296
25	39	67	511	99	237	167	54	32	124	76	18	178
26	43	81	267	97	209	154	51	28	92	63	24	337
27	46	393	188	107	871	139	48	24	74	55	26	215
28	68	297	255	92	3910	125	45	21	64	49	19	152
29	31	198	273	90	---	127	42	18	60	44	16	472
30	19	145	400	347	---	203	41	17	59	40	79	3310
31	16	---	1250	330	---	251	---	16	---	36	162	---
TOTAL	821.6	4353	4758	15504	12357	13559	5492	2072	6735	8174	765.6	7647
MEAN	26.5	145	153	500	441	437	183	66.8	224	264	24.7	255
MAX	168	1630	1250	3270	3910	3670	922	318	1350	665	162	3310
MIN	5.5	13	27	90	110	93	41	16	16	36	9.7	11
CFSM	.29	1.58	1.67	5.43	4.79	4.75	1.99	.73	2.44	2.86	.27	2.77
IN.	.33	1.76	1.92	6.26	4.99	5.48	2.22	.84	2.72	3.30	.31	3.09

CAL YR 1988 TOTAL 28674.4 MEAN 78.3 MAX 1850 MIN 1.0 CFSM .85 IN. 11.58
WTR YR 1989 TOTAL 82238.2 MEAN 225 MAX 3910 MIN 5.5 CFSM 2.45 IN. 33.22

02450250 SIPSEY FORK NEAR GRAYSON, AL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 24...	1045	36	73	75	7.90	11.0	3.5	745	9.6	89	43
DEC 06...	1510	44	94	--	--	5.0	--	--	--	--	--
FEB 13...	1000	159	75	76	7.20	7.5	1.8	749	11.8	100	19
MAR 27...	1310	139	66	--	--	15.0	--	--	--	--	--
APR 18...	1030	84	80	82	7.40	15.0	1.9	747	9.6	97	K18
18...	1225	85	74	--	--	16.0	--	--	--	--	--
MAY 31...	1500	16	96	--	--	26.0	--	--	--	--	--
JUL 20...	0845	182	76	--	--	19.5	--	--	--	--	--
AUG 14...	1140	15	90	95	7.30	20.5	1.0	734	--	--	40
SEP 06...	1405	12	85	--	--	23.5	--	--	--	--	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT 24...	47	34	7	11	1.5	1.3	7	0.1	1.4	0	33
FEB 13...	14	34	5	12	1.0	1.2	7	.1	.70	0	35
APR 18...	K16	37	4	13	1.2	1.1	6	.1	.70	0	38
AUG 14...	140	43	2	15	1.3	1.2	6	.1	.90	0	51

DATE	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT 24...	27	7.60	27	7.7	1.6	<.10	6.9	53	48	0.07	5.15
FEB 13...	29	7.80	29	5.3	1.2	.10	6.2	48	45	.06	20.6
APR 18...	31	7.80	34	4.0	1.1	.10	6.2	47	48	.06	10.7
AUG 14...	42	7.40	41	4.0	1.4	<.10	6.1	58	55	.08	2.35

02450250 SIPSEY FORK NEAR GRAYSON, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P)
OCT											
24...	<.010	<.100	0.020	<.010	0.28	0.30	0.010	0.010	<.010	0.01	0.01
FEB											
13...	<.010	<.100	<.010	<.010	--	.20	<.010	<.010	<.010	--	--
APR											
18...	<.010	<.100	.010	<.010	.29	.30	.010	<.010	<.010	.01	--
AUG											
14...	<.010	<.100	.010	.020	.29	.30	<.010	<.010	<.010	--	--

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
OCT											
24...	40	<1	24	<.5	<1	<1	<3	<1	380	<5	<4
FEB											
13...	<10	<1	19	<.5	<1	<1	<3	4	24	<5	<4
APR											
18...	10	<1	15	<.5	<1	<1	<3	<1	41	<5	<4
AUG											
14...	20	<1	18	<.5	<1	<1	<3	<1	150	<1	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	ALPHA, DISSOLVED (UG/L AS U-NAT)
OCT										
24...	50	<.1	<10	<1	<1	<1.0	26	<6	8	--
FEB										
13...	11	<.1	<10	2	<1	<1.0	26	<6	18	<.4
APR										
18...	16	<.1	<10	<1	<1	1.0	30	<6	5	--
AUG										
14...	40	<.1	<10	<1	<1	<1.0	36	<6	<3	--

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT										
24...	--	--	--	--	--	--	--	1	0.07	--
FEB										
13...	<.4	1.0	<.4	0.9	<.4	0.03	0.04	0	.15	93
APR										
18...	--	--	--	--	--	--	--	4	.91	84
AUG										
14...	--	--	--	--	--	--	--	1	.04	--

02453000 BLACKWATER CREEK NEAR MANCHESTER, AL

LOCATION.--Lat 33°54'30", long 87°15'25", in SE¼ sec. 15, T. 13 S., R. 7 W., Walker County, Hydrologic Unit 03160109, on right bank 100 ft downstream from State Highway 257, 0.2 mi downstream from small unnamed tributary, 2 mi east of Manchester, and 5.5 mi north of Jasper.

DRAINAGE.--181 mi².

PERIOD OF RECORD.--October 1938 to September 1971, October 1971 to September 1975 (annual peak discharge), October 1979 to September 1982, October 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 401.04 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 13, 1938, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Apr. 23-26, June 3 to July 19, Aug. 26 to Sept. 6. Records good except for periods of estimated record, which are poor. Possible regulation at low flow by mill dam 2 mi upstream from station. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--37 years (water years 1939-71, 1980-82, 1989), 309 ft³/s, 23.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s, Feb. 23, 1961, gage height, 13.10 ft; minimum daily discharge, 1.3 ft³/s, Oct. 25, 1938 (result of regulation).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 14	2315	*3,950	*8.00	Mar. 5	1700	3,000	7.04
Mar. 2	0730	3,690	7.75	Apr. 5	1700	2,560	6.61

Minimum daily discharge, 25 ft³/s, Aug. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	523	89	456	2170	501	3580	425	117	49	550	99	200
2	804	77	354	1910	419	3630	340	124	48	450	90	100
3	726	70	284	1550	371	2740	299	104	48	1000	86	70
4	461	71	246	1260	364	1230	1080	107	61	1300	82	50
5	260	126	217	847	602	1920	2500	489	120	1200	77	40
6	179	177	192	664	1260	2660	2400	920	250	800	75	36
7	140	159	177	559	1500	2400	1900	515	160	500	89	33
8	116	116	166	697	1130	1820	986	280	130	400	83	30
9	99	104	155	1040	792	1030	717	215	200	350	75	31
10	88	99	146	1230	609	738	564	217	300	300	68	33
11	80	97	138	1560	518	605	458	199	200	900	59	65
12	72	88	129	2800	452	522	388	164	150	1100	51	86
13	64	166	121	3720	394	452	339	134	350	800	46	61
14	56	256	115	3740	353	395	296	125	500	650	42	50
15	50	224	111	3850	314	347	275	156	1300	550	39	46
16	47	176	113	3370	296	323	264	165	1900	800	38	44
17	45	156	101	2280	278	294	237	135	1100	1400	37	43
18	49	129	96	1190	305	260	209	114	500	1000	37	40
19	46	266	93	805	487	234	193	102	1300	760	37	36
20	49	1310	92	637	617	221	193	97	1200	523	35	32
21	56	1450	96	521	1690	422	189	97	600	387	33	30
22	65	1260	114	438	2030	505	171	103	800	288	31	33
23	65	734	249	380	1710	502	160	182	900	260	29	35
24	57	450	466	337	995	509	140	123	600	246	27	113
25	49	325	392	299	663	436	130	92	400	213	25	115
26	46	363	283	274	549	371	120	81	300	178	62	80
27	44	1030	235	300	1220	330	113	74	250	148	80	75
28	69	1100	246	322	3490	295	110	68	200	125	56	79
29	200	880	281	270	---	302	100	63	200	110	50	123
30	195	599	360	460	---	593	95	59	450	141	250	584
31	119	---	1340	572	---	566	---	54	---	120	500	---
TOTAL	4919	12147	7564	40052	23909	30232	15391	5475	14566	17549	2388	2393
MEAN	159	405	244	1292	854	975	513	177	486	566	77.0	79.8
MAX	804	1450	1340	3850	3490	3630	2500	920	1900	1400	500	584
MIN	44	70	92	270	278	221	95	54	48	110	25	30
CFSM	.88	2.24	1.35	7.14	4.72	5.39	2.83	.98	2.68	3.13	.43	.44
IN.	1.01	2.50	1.55	8.23	4.91	6.21	3.16	1.13	2.99	3.61	.49	.49

WTR YR 1989 TOTAL 176585 MEAN 484 MAX 3850 MIN 25 CFSM 2.67 IN. 36.29

02453500 MULBERRY FORK AT CORDOVA, AL

LOCATION.--Lat 33°45'27", long 87°10'13", in NW¼ sec. 9, T. 15 S., R. 6 W., Walker County, Hydrologic Unit 03160109, on right bank at downstream side of abutment of bridge on St. Louis and San Francisco Railroad, just downstream from Cane Creek, 0.1 mi east of Cordova, and at mile 30.8.

DRAINAGE AREA.--1,916 mi².

PERIOD OF RECORD.--January 1890 to June 1897 fragmentary gage-height records collected by National Weather Service. June 1900 to December 1913 monthly discharge published in WSP 1304. January 1914 to December 1923 and August 1937 to September 1971 in files of U.S. Army Corps of Engineers. October 1971 to current year (gage heights only).

REVISED RECORDS.--WDR AL-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 243.60 ft above National Geodetic Vertical Datum of 1929. August 1937 to September 1961, nonrecording gage at present site and datum. Prior to August 1937, nonrecording gage at 8.2 ft lower datum.

REMARKS.--No estimated daily gage heights. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 39.80 ft, March 30, 1951; minimum, -9.35 ft, several days in October 1909 (present datum); maximum stage known, 46.5 ft (present datum), April 1892 (information by National Weather Service).

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 17.58 ft, Feb. 28; minimum, 10.38 ft, May 4.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.05	11.26	11.52	12.83	11.75	16.63	11.61	10.99	11.05	11.27	11.35	11.13
2	11.11	11.34	11.62	12.11	11.73	14.95	11.65	11.14	10.98	15.08	11.32	11.14
3	11.04	11.40	11.61	12.16	11.76	14.88	11.34	11.20	10.94	15.95	11.37	11.19
4	11.07	11.53	11.45	12.09	11.81	14.42	13.15	11.01	11.11	14.63	11.35	11.21
5	11.07	11.50	10.87	11.65	12.14	13.98	15.59	11.16	11.18	13.12	11.17	11.14
6	11.14	11.25	11.29	11.71	12.88	15.07	14.02	11.89	11.16	12.81	11.01	11.03
7	11.07	11.17	11.36	11.59	12.91	15.13	13.10	11.22	11.06	12.60	10.99	10.98
8	11.09	11.38	11.37	11.49	12.55	14.32	12.66	11.16	10.97	12.30	11.09	11.27
9	11.33	11.42	11.33	11.78	11.74	13.67	12.42	11.24	11.03	12.24	11.10	11.43
10	11.49	11.31	11.50	12.24	11.81	13.67	12.41	11.32	10.94	12.22	11.16	11.36
11	11.47	11.12	11.36	12.84	11.87	13.66	12.28	11.21	10.97	12.40	11.07	11.33
12	11.21	11.02	11.19	14.47	11.71	13.69	11.99	11.13	11.25	12.28	11.08	11.45
13	11.07	11.16	11.26	16.83	11.76	13.44	11.48	11.01	11.35	12.50	11.26	10.92
14	11.03	11.23	11.33	17.02	11.71	13.36	11.48	10.91	11.54	12.70	11.24	11.02
15	10.80	11.40	11.34	15.96	11.71	13.13	11.55	11.16	12.39	12.25	11.14	11.13
16	10.74	11.29	11.42	14.33	11.51	11.98	11.39	11.23	12.25	12.00	11.08	11.11
17	10.71	11.01	11.39	13.24	11.47	11.83	11.58	11.20	11.91	13.11	11.01	11.11
18	10.77	11.01	11.33	12.64	11.66	12.24	11.40	11.26	11.95	12.68	10.97	11.12
19	10.86	11.26	11.27	12.51	11.60	12.09	11.30	11.03	12.58	12.20	10.93	11.04
20	10.96	11.83	11.25	12.33	11.48	12.08	11.37	10.97	12.69	12.27	10.91	11.00
21	11.10	11.58	11.23	12.36	13.15	11.85	11.39	11.15	12.52	12.11	11.00	11.08
22	11.22	11.52	11.30	12.07	13.18	11.71	11.33	11.32	12.27	11.77	11.09	11.33
23	11.36	11.43	11.43	12.17	11.95	11.89	11.22	11.10	12.97	11.21	11.17	11.41
24	11.49	11.36	11.41	11.50	11.90	11.80	11.33	11.12	12.32	11.20	11.22	10.95
25	11.53	11.38	11.40	11.39	11.75	11.72	11.05	10.99	12.17	11.39	11.29	10.75
26	11.56	11.66	11.53	11.67	11.72	11.48	10.84	10.82	12.08	11.38	11.30	10.98
27	11.61	12.52	11.39	11.84	12.43	11.70	10.75	10.80	11.79	11.41	11.26	11.06
28	11.41	12.02	11.44	11.90	16.78	11.79	10.82	10.93	11.85	11.40	11.30	11.23
29	11.18	11.68	11.45	11.90	---	11.78	11.04	11.05	11.57	11.18	11.22	11.38
30	11.31	11.59	11.39	11.83	---	12.17	11.17	11.03	11.21	11.05	11.02	11.41
31	11.41	---	11.88	11.83	---	11.67	---	10.95	---	11.28	11.00	---
MEAN	11.17	11.42	11.38	12.65	12.16	13.03	11.82	11.12	11.67	12.32	11.14	11.16
MAX	11.61	12.52	11.88	17.02	16.78	16.63	15.59	11.89	12.97	15.95	11.37	11.45
MIN	10.71	11.01	10.87	11.39	11.47	11.48	10.75	10.80	10.94	11.05	10.91	10.75

CAL YR 1988 MEAN 11.18 MAX 13.24 MIN 10.67
WTR YR 1989 MEAN 11.75 MAX 17.02 MIN 10.71

02455980 TURKEY CREEK AT SEWAGE PLANT NEAR PINSON, AL

LOCATION.--Lat 33°42'40", long 86°41'46", in SE¼ sec. 24, T. 15 S., R. 2 W., Jefferson County, Hydrologic Unit 03160111, near left bank on downstream side of foot bridge, 400 ft upstream from Turkey Creek Wastewater Treatment Plant effluent, 1.8 mi northwest of Pinson, and 7 mi southeast of Morris.

DRAINAGE AREA.--27.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1988 to September 1989. June 1979 to June 1988 in files of Barton Laboratory, Jefferson County Commission.

GAGE.--Water-stage recorder. Datum of gage is 501.69 ft above National Geodetic Vertical Datum of 1929 (levels by Jefferson County Engineering Department).

REMARKS.--Estimated daily discharges: July 6, 7, August 17-31, 1988. Water-discharge records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,430 ft³/s, Nov. 20, 1988, gage height, 7.81 ft; minimum daily discharge, 9.4 ft³/s, Sept. 1, 2, 1988.

EXTREMES FOR CURRENT PERIOD.--July to September 1988. Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 12	1230	*1,190	*7.11				

Minimum daily discharge, 9.4 ft³/s, Sept. 1, 2.

Water year 1989: Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 4	1930	1,190	7.11	Feb. 28	0345	1,300	7.19
Nov. 20	0415	*2,430	*7.81	June 19	0530	1,240	7.15

Minimum daily discharge, 14 ft³/s, Oct. 25, 26, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	12	15	9.4
2	---	---	---	---	---	---	---	---	---	18	14	9.4
3	---	---	---	---	---	---	---	---	---	19	14	12
4	---	---	---	---	---	---	---	---	---	20	13	24
5	---	---	---	---	---	---	---	---	---	16	12	14
6	---	---	---	---	---	---	---	---	---	15	12	12
7	---	---	---	---	---	---	---	---	---	14	12	14
8	---	---	---	---	---	---	---	---	---	12	11	12
9	---	---	---	---	---	---	---	---	---	12	11	11
10	---	---	---	---	---	---	---	---	---	12	11	12
11	---	---	---	---	---	---	---	---	---	16	11	11
12	---	---	---	---	---	---	---	---	---	18	12	128
13	---	---	---	---	---	---	---	---	---	15	11	38
14	---	---	---	---	---	---	---	---	---	17	11	26
15	---	---	---	---	---	---	---	---	---	14	10	22
16	---	---	---	---	---	---	---	---	---	13	10	93
17	---	---	---	---	---	---	---	---	---	12	10	107
18	---	---	---	---	---	---	---	---	---	12	10	54
19	---	---	---	---	---	---	---	---	---	12	10	39
20	---	---	---	---	---	---	---	---	---	12	11	37
21	---	---	---	---	---	---	---	---	---	12	11	39
22	---	---	---	---	---	---	---	---	---	20	30	39
23	---	---	---	---	---	---	---	---	---	18	20	30
24	---	---	---	---	---	---	---	---	---	15	18	26
25	---	---	---	---	---	---	---	---	---	24	16	24
26	---	---	---	---	---	---	---	---	---	35	14	24
27	---	---	---	---	---	---	---	---	---	22	12	24
28	---	---	---	---	---	---	---	---	---	19	10	21
29	---	---	---	---	---	---	---	---	---	19	11	31
30	---	---	---	---	---	---	---	---	---	18	10	29
31	---	---	---	---	---	---	---	---	---	17	10	---
TOTAL	---	---	---	---	---	---	---	---	---	510	393	971.8
MEAN	---	---	---	---	---	---	---	---	---	16.5	12.7	32.4
MAX	---	---	---	---	---	---	---	---	---	35	30	128
MIN	---	---	---	---	---	---	---	---	---	12	10	9.4
CFSM	---	---	---	---	---	---	---	---	---	.60	.46	1.18
IN.	---	---	---	---	---	---	---	---	---	.69	.53	1.32

02455980 TURKEY CREEK AT SEWAGE PLANT NEAR PINSON, AL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	18	42	106	41	188	99	62	29	93	30	21
2	60	16	39	70	40	139	83	44	30	433	30	23
3	35	16	38	140	40	107	74	39	30	237	29	20
4	30	156	37	98	39	235	358	38	33	164	28	19
5	28	121	35	72	48	266	285	110	36	119	25	19
6	27	43	35	64	58	174	172	63	95	87	28	19
7	26	36	34	53	101	134	136	47	38	71	27	18
8	26	32	33	54	72	104	135	43	50	60	24	18
9	25	29	32	70	61	85	120	51	44	52	23	18
10	24	28	31	126	55	75	93	54	38	48	23	18
11	21	27	30	266	52	68	81	43	36	46	22	44
12	18	28	29	280	48	62	73	41	35	43	22	32
13	19	28	28	323	46	58	67	40	33	41	21	29
14	18	24	27	198	44	55	63	40	39	40	21	35
15	16	25	27	202	41	52	71	39	81	39	21	37
16	16	34	28	142	40	49	60	38	62	38	21	33
17	17	31	28	109	41	47	56	37	46	37	21	29
18	16	27	27	87	40	46	53	37	41	36	21	28
19	15	26	27	73	40	44	57	36	225	37	20	27
20	15	321	26	73	41	44	53	36	87	43	20	26
21	18	58	26	56	100	125	50	36	138	36	19	29
22	16	44	25	51	59	81	48	35	109	43	19	68
23	15	41	44	48	50	140	46	35	79	42	19	38
24	15	38	35	46	47	121	45	34	61	39	22	33
25	14	37	34	44	45	95	44	33	51	34	21	94
26	14	44	33	42	44	80	43	32	46	30	20	48
27	14	96	32	41	97	70	42	32	43	31	19	35
28	16	75	35	40	512	63	41	31	44	32	19	31
29	16	53	32	39	---	132	41	32	40	32	21	97
30	16	46	35	52	---	236	40	30	40	32	19	64
31	17	---	70	42	---	135	---	29	---	31	19	---
TOTAL	734	1598	1034	3107	1942	3310	2629	1297	1759	2146	694	1050
MEAN	23.7	53.3	33.4	100	69.4	107	87.6	41.8	58.6	69.2	22.4	35.0
MAX	111	321	70	323	512	266	358	110	225	433	30	97
MIN	14	16	25	39	39	44	40	29	29	30	19	18
CFSM	.86	1.94	1.22	3.66	2.53	3.90	3.20	1.53	2.14	2.53	.82	1.28
IN.	1.00	2.17	1.40	4.22	2.64	4.49	3.57	1.76	2.39	2.91	.94	1.43

WTR YR 1989 TOTAL 21300 MEAN 58.4 MAX 512 MIN 14 CFSM 2.13 IN. 28.92

02455980 TURKEY CREEK AT SEWAGE PLANT NEAR PINSON, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1989 to September 1989.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1989 to September 1989.
WATER TEMPERATURE: January 1989 to September 1989.
DISSOLVED OXYGEN: January 1989 to September 1989.

INSTRUMENTATION.--Water-quality monitor since January 1989.

REMARKS.--Interruptions in the daily record were due to malfunctions of the instrument.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 358 microsiemens, Sept. 8; minimum, 85 microsiemens, June 19.
WATER TEMPERATURE: Maximum, 26.1°C, July 29, Aug. 4; minimum, 6.5°C, Feb. 24.
DISSOLVED OXYGEN: Maximum, 11.3 mg/L, Jan. 5; minimum, 6.3 mg/L, Aug. 25.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	251	240	247
6	---	---	---	---	---	---	---	---	---	256	247	251
7	---	---	---	---	---	---	---	---	---	262	255	258
8	---	---	---	---	---	---	---	---	---	262	251	258
9	---	---	---	---	---	---	---	---	---	263	229	249
10	---	---	---	---	---	---	---	---	---	245	217	235
11	---	---	---	---	---	---	---	---	---	245	157	205
12	---	---	---	---	---	---	---	---	---	211	141	197
13	---	---	---	---	---	---	---	---	---	197	169	185
14	---	---	---	---	---	---	---	---	---	207	179	201
15	---	---	---	---	---	---	---	---	---	212	179	200
16	---	---	---	---	---	---	---	---	---	222	212	217
17	---	---	---	---	---	---	---	---	---	230	222	225
18	---	---	---	---	---	---	---	---	---	237	229	232
19	---	---	---	---	---	---	---	---	---	242	236	239
20	---	---	---	---	---	---	---	---	---	270	242	248
21	---	---	---	---	---	---	---	---	---	258	249	252
22	---	---	---	---	---	---	---	---	---	256	251	253
23	---	---	---	---	---	---	---	---	---	257	254	255
24	---	---	---	---	---	---	---	---	---	259	257	258
25	---	---	---	---	---	---	---	---	---	261	256	259
26	---	---	---	---	---	---	---	---	---	263	259	261
27	---	---	---	---	---	---	---	---	---	264	258	262
28	---	---	---	---	---	---	---	---	---	265	260	262
29	---	---	---	---	---	---	---	---	---	266	260	263
30	---	---	---	---	---	---	---	---	---	265	216	244
31	---	---	---	---	---	---	---	---	---	261	251	255
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

02455980 TURKEY CREEK AT SEWAGE PLANT NEAR PINSON, AL--Continued

SPECIFIC CONDUCTANCE MICROSIEMS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	263	256	260	204	188	196	222	215	218	245	154	224
2	264	258	261	214	203	208	228	222	224	255	246	250
3	264	257	261	223	214	218	232	227	229	312	251	257
4	264	259	262	227	127	197	234	115	181	256	250	254
5	264	214	248	193	172	185	192	178	186	257	127	211
6	248	224	240	205	192	198	202	193	198	246	208	231
7	233	199	222	214	204	208	213	201	206	251	245	248
8	240	234	237	221	213	217	215	176	205	252	250	251
9	242	238	240	227	221	224	217	196	209	255	175	247
10	245	241	243	231	227	229	223	217	220	247	181	228
11	248	243	245	235	232	234	227	223	225	251	246	248
12	251	246	248	238	235	237	230	227	228	252	249	251
13	254	248	251	242	239	240	241	231	236	252	248	251
14	256	248	253	244	241	243	242	230	234	254	243	250
15	259	252	256	249	243	246	237	224	231	257	250	252
16	261	257	259	249	242	246	240	235	237	255	252	253
17	275	258	262	250	246	248	242	236	240	257	253	255
18	262	255	259	256	248	252	244	237	241	259	252	256
19	260	255	258	259	248	253	245	221	239	259	255	257
20	261	256	258	258	240	251	246	236	239	259	246	255
21	248	169	213	240	167	213	248	240	245	259	255	257
22	250	244	247	232	221	229	249	240	246	258	252	256
23	251	247	249	231	190	209	251	242	248	260	256	258
24	251	249	250	221	213	217	251	243	248	270	256	259
25	253	248	251	227	216	223	253	243	249	261	257	259
26	254	251	253	231	226	228	256	243	251	262	258	260
27	254	142	232	235	228	232	256	243	251	262	257	260
28	188	128	168	240	231	236	256	244	251	317	258	263
29	---	---	---	241	123	222	257	246	253	300	258	269
30	---	---	---	208	130	192	257	247	254	268	261	264
31	---	---	---	215	208	211	---	---	---	268	261	263
MONTH	275	128	246	259	123	224	257	115	231	317	127	252

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	265	261	263	260	116	238	268	261	265	268	246	256
2	266	255	261	195	116	160	269	251	261	301	243	258
3	265	258	262	208	170	196	262	256	259	266	258	261
4	263	230	252	217	191	207	266	256	260	283	261	263
5	258	233	248	229	212	223	265	259	262	337	260	266
6	255	101	208	238	230	233	277	211	256	298	262	270
7	263	250	258	243	235	239	309	210	252	277	270	275
8	266	175	241	247	243	245	265	260	263	358	270	28
9	259	228	248	251	248	249	265	259	263	318	273	277
10	264	260	261	258	249	253	266	259	263	278	271	275
11	265	260	263	256	252	254	267	258	264	276	133	231
12	270	263	265	259	253	257	267	258	264	267	252	263
13	271	260	266	260	256	259	267	259	263	273	267	269
14	268	194	256	262	255	259	268	257	265	272	252	261
15	238	166	208	263	256	260	273	260	265	264	242	252
16	249	231	241	263	258	261	266	259	262	285	257	261
17	257	248	252	264	259	262	265	259	261	267	259	264
18	270	256	258	265	259	262	325	256	262	347	264	270
19	260	85	189	265	257	262	263	256	258	273	263	267
20	245	145	231	259	135	236	264	256	258	281	263	267
21	232	149	210	262	256	259	266	257	260	269	213	262
22	243	166	226	253	235	240	265	259	262	251	133	211
23	238	228	233	249	242	245	266	260	262	264	250	258
24	253	239	242	257	250	252	266	241	260	270	264	266
25	252	246	249	267	257	262	263	216	245	270	108	225
26	254	251	252	272	264	268	267	260	263	262	208	244
27	257	252	255	271	263	267	306	263	267	300	263	267
28	260	221	252	266	260	263	272	261	264	271	265	269
29	262	255	259	266	259	263	275	258	263	271	108	212
30	264	255	260	267	261	264	267	258	261	243	202	232
31	---	---	---	267	259	264	268	261	263	---	---	---
MONTH	271	85	246	272	116	247	325	210	261	358	108	258

02455980 TURKEY CREEK AT SEWAGE PLANT NEAR PINSON, AL--Continued

WATER TEMPERATURE (DEG CEL) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	12.2	10.6	11.2
6	---	---	---	---	---	---	---	---	---	15.8	11.8	13.9
7	---	---	---	---	---	---	---	---	---	16.3	13.1	14.8
8	---	---	---	---	---	---	---	---	---	15.9	12.4	14.3
9	---	---	---	---	---	---	---	---	---	12.2	10.5	11.0
10	---	---	---	---	---	---	---	---	---	13.1	10.4	11.8
11	---	---	---	---	---	---	---	---	---	12.8	11.6	12.2
12	---	---	---	---	---	---	---	---	---	14.2	12.9	13.7
13	---	---	---	---	---	---	---	---	---	13.7	11.9	12.7
14	---	---	---	---	---	---	---	---	---	13.4	12.2	12.8
15	---	---	---	---	---	---	---	---	---	13.1	12.0	12.6
16	---	---	---	---	---	---	---	---	---	13.3	10.9	12.0
17	---	---	---	---	---	---	---	---	---	12.9	9.6	11.1
18	---	---	---	---	---	---	---	---	---	13.5	9.7	11.4
19	---	---	---	---	---	---	---	---	---	13.7	10.6	12.1
20	---	---	---	---	---	---	---	---	---	13.6	10.5	12.5
21	---	---	---	---	---	---	---	---	---	12.5	9.4	10.8
22	---	---	---	---	---	---	---	---	---	13.1	9.4	11.0
23	---	---	---	---	---	---	---	---	---	13.6	9.1	11.3
24	---	---	---	---	---	---	---	---	---	14.1	10.7	12.3
25	---	---	---	---	---	---	---	---	---	14.8	10.5	12.5
26	---	---	---	---	---	---	---	---	---	14.7	11.4	13.2
27	---	---	---	---	---	---	---	---	---	14.5	11.3	13.5
28	---	---	---	---	---	---	---	---	---	14.4	9.6	12.0
29	---	---	---	---	---	---	---	---	---	15.5	11.1	13.3
30	---	---	---	---	---	---	---	---	---	15.8	12.7	14.3
31	---	---	---	---	---	---	---	---	---	15.3	10.7	13.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	17.0	12.4	14.8	11.7	11.0	11.4	18.0	12.0	14.7	19.6	18.3	18.9
2	17.9	15.9	16.6	13.2	11.4	12.3	18.8	12.3	15.3	20.7	16.4	18.3
3	17.0	13.0	15.6	14.2	11.9	13.1	18.3	15.4	16.7	19.6	15.6	17.4
4	12.7	11.4	11.8	14.4	13.1	13.6	17.0	15.9	16.5	17.1	16.3	16.7
5	11.3	10.2	10.9	15.9	13.3	14.8	17.7	14.4	15.8	19.1	16.6	17.6
6	11.2	9.4	10.6	14.2	10.8	12.1	15.8	12.8	14.3	20.4	16.5	18.1
7	10.1	8.3	9.2	11.1	10.5	10.8	17.3	13.4	14.8	19.4	14.1	16.6
8	11.7	8.5	9.9	14.5	10.2	12.1	15.3	13.6	14.5	20.1	14.1	17.1
9	10.7	7.7	9.0	15.7	10.1	12.7	14.6	12.9	13.9	19.7	17.4	18.5
10	11.4	6.8	8.9	16.9	10.7	13.7	14.0	12.4	13.3	19.0	16.5	18.1
11	12.9	7.9	10.2	17.8	11.6	14.6	16.8	10.7	13.3	19.5	14.3	16.8
12	14.4	9.5	11.7	18.4	12.4	15.3	17.7	11.2	14.0	19.9	13.9	16.8
13	15.3	12.0	13.6	18.0	13.5	15.8	18.7	12.3	15.2	18.0	15.3	16.6
14	18.0	14.6	16.0	20.5	14.9	17.3	17.1	12.8	15.1	17.3	16.0	16.8
15	19.3	15.7	17.1	19.5	16.5	17.6	16.5	15.0	15.7	20.7	16.4	18.2
16	15.8	14.2	15.2	19.0	14.3	16.5	19.9	13.2	16.1	20.9	15.7	18.2
17	14.0	11.9	13.2	20.2	13.6	16.8	20.7	13.5	16.8	21.8	16.2	18.9
18	11.7	11.0	11.3	20.6	15.8	17.9	21.5	14.7	17.8	19.6	17.6	18.6
19	12.9	10.9	11.8	18.9	13.3	16.2	18.4	15.5	17.1	22.3	18.0	19.8
20	14.4	12.0	13.0	20.0	14.7	17.3	21.1	14.5	17.5	20.6	19.2	19.8
21	14.7	12.4	13.8	17.4	13.7	15.8	21.4	16.3	18.3	23.8	18.2	20.6
22	12.2	9.5	11.1	14.5	13.0	13.7	21.7	15.1	18.1	21.8	18.6	20.3
23	9.7	7.6	8.6	13.4	11.9	12.6	22.4	16.1	18.9	24.3	19.2	21.2
24	11.3	6.5	8.6	14.9	12.5	13.5	22.4	16.8	19.3	23.9	18.1	20.9
25	12.9	7.3	10.1	15.6	12.8	14.0	22.5	16.8	19.4	24.8	19.8	21.9
26	13.6	11.1	12.3	18.6	12.8	15.4	22.7	17.0	19.6	24.9	20.5	22.4
27	13.4	9.9	12.5	19.7	13.8	16.5	22.4	17.4	19.8	23.7	20.1	21.6
28	12.9	9.4	10.9	20.9	15.1	17.7	23.0	17.7	20.2	24.0	18.0	20.7
29	---	---	---	21.0	16.1	18.0	21.6	18.5	20.0	23.5	17.5	20.4
30	---	---	---	18.5	16.2	17.2	20.8	17.9	19.5	24.2	18.7	21.4
31	---	---	---	16.2	13.6	15.5	---	---	---	24.7	19.7	22.0
MONTH	19.3	6.5	12.1	21.0	10.1	14.9	23.0	10.7	16.7	24.9	13.9	19.1

02455980 TURKEY CREEK AT SEWAGE PLANT NEAR PINSON, AL--Continued

WATER TEMPERATURE (DEG CEL) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.4	19.9	22.0	23.4	20.5	21.8	23.9	21.4	22.6	22.9	21.1	22.3
2	24.0	19.8	21.6	23.5	21.7	22.6	25.0	21.4	22.9	22.4	20.8	21.6
3	23.2	19.9	21.2	22.2	21.0	21.5	25.0	20.9	22.8	24.5	20.2	22.1
4	21.9	19.8	20.8	21.9	20.3	21.0	26.1	21.1	23.4	24.8	20.9	22.7
5	21.4	19.8	20.5	21.9	20.0	20.8	25.6	20.9	23.2	24.2	19.2	21.9
6	23.2	19.4	21.1	22.4	19.8	20.9	25.6	21.0	22.9	23.0	20.2	21.5
7	23.6	19.0	21.1	23.1	20.0	21.4	24.2	20.7	22.2	23.7	20.3	21.7
8	21.5	19.3	20.2	24.2	20.0	21.8	23.1	18.8	20.8	24.4	19.0	22.0
9	22.3	20.2	21.0	24.0	20.2	21.8	22.6	17.8	20.2	23.9	20.0	22.0
10	22.9	18.7	20.6	24.7	20.3	22.0	23.4	18.7	20.8	23.5	21.0	22.2
11	21.5	19.2	20.3	24.2	20.0	21.7	23.0	18.4	20.6	23.0	20.9	22.1
12	23.8	19.4	21.3	25.2	20.1	22.3	23.6	18.5	20.8	23.6	20.7	22.2
13	24.3	20.5	21.9	23.8	20.5	21.9	23.0	18.1	20.6	24.0	20.9	22.4
14	23.4	20.0	21.4	23.4	20.5	21.8	22.6	18.9	20.6	24.1	20.9	22.3
15	21.8	20.4	21.0	24.3	20.2	22.1	23.0	19.2	21.0	22.1	20.6	21.5
16	22.6	20.2	21.1	21.9	20.5	21.1	22.8	19.6	21.2	21.1	18.8	19.9
17	23.5	18.4	20.7	24.4	19.8	21.7	22.5	19.9	21.1	22.3	18.2	20.0
18	23.3	18.9	21.0	23.2	19.6	21.4	24.0	19.6	21.6	21.9	17.4	19.7
19	22.1	20.4	21.0	23.8	20.2	21.7	23.6	19.5	21.6	21.7	17.5	19.6
20	22.2	19.7	20.7	24.4	20.8	22.6	23.6	19.9	21.7	21.5	17.7	19.5
21	22.1	20.2	21.1	23.7	20.5	22.0	25.0	20.0	22.4	20.5	18.0	19.2
22	21.7	20.1	20.7	23.5	21.6	22.5	24.1	20.9	22.5	22.0	20.3	21.1
23	23.3	19.2	20.9	24.6	21.5	22.7	25.2	20.8	22.9	20.1	17.3	19.2
24	23.3	19.7	21.3	24.6	21.7	22.8	25.0	21.0	23.0	17.5	15.1	16.6
25	24.5	19.9	21.9	26.0	20.9	23.2	25.0	21.2	23.2	17.5	16.2	16.7
26	24.6	20.4	22.3	25.9	21.0	23.2	23.6	18.5	22.4	19.9	17.5	18.5
27	24.2	20.4	22.1	25.9	21.0	23.3	24.5	20.5	22.5	19.8	17.8	18.7
28	23.6	20.5	21.9	25.6	21.3	23.2	25.3	20.5	22.9	18.7	16.8	17.4
29	23.6	20.3	21.7	26.1	21.2	23.4	23.3	21.1	22.4	18.5	16.8	17.5
30	23.0	20.4	21.5	24.2	21.6	23.0	23.7	21.0	22.4	19.8	18.2	18.9
31	---	---	---	25.8	21.5	23.4	24.6	20.4	22.4	---	---	---
MONTH	24.6	18.4	21.2	26.1	19.6	22.1	26.1	17.8	22.0	24.8	15.1	20.4

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	11.3	10.2	10.9
6	---	---	---	---	---	---	---	---	---	10.4	9.3	9.9
7	---	---	---	---	---	---	---	---	---	10.3	9.1	9.7
8	---	---	---	---	---	---	---	---	---	10.1	9.2	9.6
9	---	---	---	---	---	---	---	---	---	10.6	9.9	10.3
10	---	---	---	---	---	---	---	---	---	10.6	9.8	10.2
11	---	---	---	---	---	---	---	---	---	10.2	9.9	10.0
12	---	---	---	---	---	---	---	---	---	9.8	9.5	9.7
13	---	---	---	---	---	---	---	---	---	10.1	9.7	9.9
14	---	---	---	---	---	---	---	---	---	10.0	9.6	9.8
15	---	---	---	---	---	---	---	---	---	9.9	9.7	9.8
16	---	---	---	---	---	---	---	---	---	10.2	9.7	10.0
17	---	---	---	---	---	---	---	---	---	10.5	9.7	10.1
18	---	---	---	---	---	---	---	---	---	10.5	9.5	10.1
19	---	---	---	---	---	---	---	---	---	10.4	9.4	9.9
20	---	---	---	---	---	---	---	---	---	10.1	9.6	9.8
21	---	---	---	---	---	---	---	---	---	10.7	9.7	10.2
22	---	---	---	---	---	---	---	---	---	10.7	9.5	10.1
23	---	---	---	---	---	---	---	---	---	10.7	9.4	10.0
24	---	---	---	---	---	---	---	---	---	10.6	9.4	9.9
25	---	---	---	---	---	---	---	---	---	10.7	9.3	10.0
26	---	---	---	---	---	---	---	---	---	10.6	9.2	9.8
27	---	---	---	---	---	---	---	---	---	10.5	9.3	9.7
28	---	---	---	---	---	---	---	---	---	10.9	9.2	10.0
29	---	---	---	---	---	---	---	---	---	10.8	9.0	9.8
30	---	---	---	---	---	---	---	---	---	9.8	9.0	9.3
31	---	---	---	---	---	---	---	---	---	10.6	8.9	9.7
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.3	8.6	9.4	9.9	9.7	9.8	9.9	8.6	9.2	8.3	7.6	7.9
2	10.1	8.5	9.1	9.8	9.4	9.6	9.7	8.3	9.0	9.2	7.7	8.3
3	9.7	8.8	9.1	9.7	9.1	9.4	9.2	8.2	8.7	10.5	7.8	8.4
4	10.6	9.5	9.9	9.5	9.1	9.3	8.6	8.3	8.4	8.6	8.0	8.2
5	10.2	9.7	9.9	9.3	8.8	9.0	9.1	8.6	8.8	8.3	7.8	8.1
6	10.2	9.7	10.0	9.8	9.1	9.5	9.5	8.9	9.1	8.6	7.8	8.2
7	10.6	10.1	10.4	9.9	9.7	9.8	9.4	8.6	9.0	9.2	8.0	8.5
8	10.8	9.8	10.3	10.1	9.1	9.6	9.1	8.7	8.9	9.2	7.8	8.5
9	11.1	10.1	10.5	9.9	8.8	9.4	9.4	8.9	9.1	8.9	7.8	8.3
10	11.2	9.7	10.5	9.9	8.7	9.3	9.5	9.0	9.2	8.8	7.9	8.3
11	10.9	9.4	10.1	9.8	8.5	9.1	9.9	8.6	9.3	9.2	8.0	8.6
12	10.7	9.1	9.8	9.6	8.4	9.1	9.8	8.4	9.1	9.2	8.0	8.6
13	10.3	8.7	9.4	9.7	8.4	9.0	9.7	8.2	8.9	9.2	8.3	8.6
14	10.1	8.4	9.1	9.5	8.1	8.8	9.6	8.3	8.8	9.0	8.2	8.5
15	9.9	8.1	8.9	9.6	8.3	8.8	9.3	8.3	8.6	9.1	7.9	8.5
16	9.8	8.6	9.0	10.1	8.5	9.2	9.7	7.9	8.8	9.6	7.9	8.6
17	10.1	9.0	9.4	10.1	8.2	9.2	9.8	7.7	8.7	9.7	7.8	8.6
18	10.1	9.4	9.7	10.1	8.3	9.1	9.8	7.6	8.6	9.1	8.1	8.5
19	10.5	9.1	9.7	10.6	8.5	9.4	9.8	8.0	8.5	9.3	7.5	8.3
20	10.2	8.7	9.3	10.3	8.3	9.2	10.0	7.7	8.7	8.6	7.7	8.0
21	9.2	8.7	9.0	9.5	8.7	9.1	10.2	7.7	8.7	8.8	7.3	8.0
22	9.9	9.2	9.6	10.1	9.3	9.6	10.3	7.5	8.7	8.6	7.4	7.9
23	10.8	9.9	10.3	10.0	9.5	9.8	10.1	7.5	8.6	8.5	7.2	7.8
24	11.0	9.9	10.4	10.1	9.4	9.8	10.2	7.4	8.5	8.6	7.1	7.8
25	11.1	9.4	10.3	10.2	9.2	9.7	10.3	7.4	8.5	8.4	7.0	7.7
26	10.2	9.1	9.6	10.3	8.7	9.5	10.2	7.3	8.5	8.4	7.1	7.6
27	10.0	9.1	9.4	10.2	8.5	9.3	10.2	7.3	8.4	8.5	7.2	7.7
28	10.1	9.5	9.9	10.0	8.2	9.1	9.9	7.2	8.3	8.7	7.2	7.9
29	---	---	---	9.9	8.1	8.9	9.9	7.4	8.2	8.8	7.1	7.9
30	---	---	---	8.9	8.4	8.7	9.6	7.4	8.2	8.6	7.1	7.8
31	---	---	---	9.3	8.6	8.9	---	---	---	8.7	7.3	7.8
MONTH	11.2	8.1	9.7	10.6	8.1	9.3	10.3	7.2	8.7	10.5	7.0	8.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.7	7.2	7.8	---	---	---	8.7	7.4	7.9	9.7	7.8	8.6
2	8.6	7.3	7.7	---	---	---	8.4	6.8	7.7	9.7	7.3	8.4
3	8.7	7.3	7.8	---	---	---	8.6	6.8	7.5	10.2	7.7	8.7
4	8.6	7.1	7.6	---	---	---	8.3	6.6	7.3	10.1	7.8	8.8
5	8.1	7.2	7.6	---	---	---	8.3	6.7	7.3	11.0	8.0	9.1
6	7.8	7.1	7.6	---	---	---	8.3	6.7	7.3	8.8	7.2	8.2
7	8.2	7.1	7.6	---	---	---	8.4	6.7	7.4	8.8	7.1	7.7
8	7.9	7.2	7.5	---	---	---	9.0	7.3	7.9	8.6	7.2	7.7
9	8.1	7.3	7.6	---	---	---	10.0	7.4	8.2	9.7	6.9	7.5
10	8.6	7.3	7.9	---	---	---	9.3	7.4	8.2	8.4	6.8	7.4
11	8.3	7.4	7.8	---	---	---	9.7	7.5	8.4	7.7	7.0	7.3
12	8.4	7.1	7.7	---	---	---	9.9	7.5	8.5	8.4	7.0	7.4
13	8.3	7.0	7.5	---	---	---	9.9	7.6	8.4	8.5	7.0	7.6
14	8.2	7.2	7.5	---	---	---	9.5	7.7	8.4	8.4	7.0	7.5
15	7.5	7.3	7.4	---	---	---	9.6	7.8	8.4	7.9	7.2	7.5
16	7.9	7.3	7.6	---	---	---	9.6	7.8	8.5	9.0	7.3	8.0
17	8.4	7.2	7.7	---	---	---	9.5	7.6	8.4	9.3	7.5	8.2
18	8.5	7.2	7.8	---	---	---	9.6	7.9	8.5	9.7	7.6	8.2
19	8.5	7.3	7.5	---	---	---	10.7	7.9	8.8	9.4	7.7	8.4
20	7.8	7.2	7.5	7.7	6.4	7.0	9.8	8.0	8.7	10.2	7.7	8.4
21	7.9	7.4	7.5	7.8	6.6	7.1	9.6	7.9	8.5	11.0	7.8	9.0
22	7.9	7.4	7.7	7.5	6.8	7.1	9.5	7.5	8.4	8.2	7.6	7.9
23	7.9	7.3	7.5	7.8	6.9	7.2	10.0	7.8	8.7	9.2	7.9	8.4
24	8.0	7.1	7.5	7.8	6.9	7.3	9.3	7.6	8.2	9.4	8.2	8.7
25	8.0	7.3	7.6	8.1	6.8	7.4	9.0	6.3	7.9	8.7	8.3	8.4
26	8.1	7.1	7.9	8.5	6.9	7.5	9.4	7.6	8.4	8.8	8.0	8.3
27	8.2	7.5	8.0	8.5	6.9	7.5	9.7	7.5	8.4	8.9	7.8	8.3
28	---	---	---	8.4	7.0	7.5	9.7	7.7	8.6	9.9	7.9	8.7
29	---	---	---	8.6	7.0	7.6	9.6	7.5	8.5	9.0	8.5	8.7
30	---	---	---	8.5	7.2	7.7	9.8	7.4	8.5	10.2	7.8	8.4
31	---	---	---	8.7	7.2	7.8	10.0	7.9	8.7	---	---	---
MONTH	---	---	---	---	---	---	10.7	6.3	8.2	11.0	6.8	8.2

02456500 LOCUST FORK AT SAYRE, AL

LOCATION.--Lat 33°42'35", long 86°59'00", in NW¼ sec. 29, T. 15 S., R. 4 W., Jefferson County, Hydrologic Unit 03160111, on left bank 150 ft upstream from bridge on county road at Sayre, 1.5 mi downstream from Camp Creek, and at mile 33.9.

DRAINAGE AREA.--885 mi^2.

PERIOD OF RECORD.--July 1928 to March 1932 (published as "near Warrior") and October 1941 to current year. Monthly discharge only for July 1928 and low-water periods October 1941 to September 1945, published in WSP 1304.

REVISED RECORDS.--WSP 1142: 1943(M). WSP 1304: 1929(M). WSP 1434: 1943. WDR AL-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 258.64 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to March 1932, nonrecording gage at site 9 mi upstream, at different datum. May 11, 1942, to June 30, 1949, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: June 24-28. Records good. Diversion above station subsequent to 1938 from Inland Reservoir, usable capacity 60,000 acre-ft on Blackburn Fork for industrial water supply for city of Birmingham. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--51 years (water years 1929-31, 1942-89), 1,447 ft^3/s, 22.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,300 ft^3/s, Jan. 7, 1949, gage height, 47.9 ft; maximum gage height, 48.60 ft, Feb. 23, 1961; minimum discharge, 17 ft^3/s, Sept. 28, Oct. 2, 1931.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 17,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 14	1000	21,200	27.71	July 3	1500	17,300	24.52
Mar. 1	1100	*21,600	*27.96				

Minimum discharge, 107 ft^3/s, Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	973	261	2250	6040	1390	20700	4000	638	276	1570	447	141
2	3080	259	1790	5070	1210	10900	2960	748	259	7760	445	162
3	2540	258	1480	4340	1110	5400	2400	620	266	16700	440	202
4	1720	360	1310	6120	1070	4220	3630	573	365	16100	416	221
5	1260	2000	1160	4770	1300	7930	13100	1100	410	9140	409	165
6	939	1560	1040	3700	3450	10900	9570	3810	1080	4850	391	145
7	758	1260	952	3110	5470	7220	5380	2870	1040	3710	386	133
8	638	954	876	2740	5260	4680	4100	1710	832	2940	488	121
9	550	801	812	3330	3880	3580	3670	1290	940	2280	368	113
10	493	704	752	5400	2970	2920	3220	1290	928	2060	275	109
11	442	633	702	8940	2460	2470	2590	1530	834	1750	245	111
12	394	576	661	15300	2120	2140	2220	1220	667	1440	224	117
13	347	573	617	18400	1840	1880	1930	949	764	1380	210	130
14	311	570	578	20300	1640	1680	1710	835	937	1400	196	161
15	280	547	547	12300	1450	1570	1590	874	4010	1220	183	263
16	259	586	518	7390	1310	1470	1710	846	14100	1010	175	421
17	241	821	486	5410	1230	1400	1620	744	10500	2910	173	335
18	231	852	457	4130	1200	1260	1350	648	4100	3990	173	227
19	232	812	441	3280	1230	1140	1200	581	6540	2080	167	177
20	220	2900	425	2760	1450	1060	1140	536	11300	1570	167	151
21	222	4570	415	2360	3590	3580	1040	552	6880	1450	155	135
22	246	3000	408	2000	6640	4710	942	547	10300	1130	147	343
23	248	2180	719	1770	4310	3850	856	564	9810	1030	142	515
24	248	1630	1550	1580	3110	4830	768	656	e5800	874	134	278
25	233	1340	2450	1440	2470	4150	727	646	e3500	807	154	251
26	208	1210	1960	1310	2130	3220	670	512	e2100	711	151	603
27	191	4160	1520	1220	2210	2620	613	429	e1450	632	153	408
28	185	5170	1300	1180	13800	2230	574	372	e1570	577	137	521
29	213	3930	1280	1130	---	1960	540	335	1690	578	128	1570
30	240	2840	1290	1150	---	4960	515	305	1380	555	130	3490
31	263	---	2480	1410	---	5890	---	296	---	502	125	---
TOTAL	18405	47317	33226	159380	81300	136520	76355	28626	104628	94706	7534	11719
MEAN	594	1577	1072	5141	2904	4404	2545	923	3488	3055	243	391
MAX	3080	5170	2480	20300	13800	20700	13100	3810	14100	16700	488	3490
MIN	185	258	408	1130	1070	1060	515	296	259	502	.25	109
CFSM	.67	1.78	1.21	5.81	3.28	4.98	2.88	1.04	3.94	3.45	.27	.44
IN.	.77	1.99	1.40	6.70	3.42	5.74	3.21	1.20	4.40	3.98	.32	.49

CAL YR 1988 TOTAL 316162 MEAN 864 MAX 7470 MIN 40 CFSM .98 IN. 13.29
WTR YR 1989 TOTAL 799716 MEAN 2191 MAX 20700 MIN 109 CFSM 2.48 IN. 33.62

e Estimated

02457595 FIVEMILE CREEK NEAR REPUBLIC, AL

LOCATION.--Lat 33°35'49", long 86°52'05", in SE¼ sec. 32, T. 16 S., R. 3 W., Jefferson County, Hydrologic Unit 03160111, on left bank of woods location on Jefferson County property near Sheriff Dept. Firing Range and near Fivemile Creek Sewage Treatment Plant.

DRAINAGE AREA.--51.9 mi².

PERIOD OF RECORD.--September 1988 to October 1989.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1988 to September 1989.
WATER TEMPERATURE: October 1988 to September 1989.
DISSOLVED OXYGEN: October 1988 to September 1989.

INSTRUMENTATION.--Water-quality monitor since September 1988.

REMARKS.--Interruptions in the daily record were due to malfunctions of the instrument.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 847 microsiemens, Oct. 11; minimum, 100 microsiemens, Feb. 28.
WATER TEMPERATURE: Maximum, 28.4°C, Aug. 25; minimum, 3.5°C, Dec. 18.
DISSOLVED OXYGEN: Maximum, 14.9 mg/L, Sept. 5; minimum, 4.0 mg/L, June 16.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	602	254	479	767	699	728	506	478	493	414	334	374
2	449	297	385	752	702	728	565	508	536	458	412	435
3	520	453	488	756	732	748	583	529	559	474	389	435
4	613	517	540	732	339	583	567	534	552	467	397	430
5	703	625	673	486	354	428	595	549	580	490	472	483
6	717	691	703	551	489	521	575	544	558	491	405	450
7	765	714	734	601	553	576	591	558	574	508	433	472
8	780	747	765	621	602	616	574	540	550	510	448	479
9	785	768	776	643	620	632	571	545	552	480	323	425
10	792	772	781	664	644	652	577	561	569	352	286	311
11	847	767	813	656	645	650	583	569	576	355	186	271
12	756	688	717	655	645	648	637	568	596	268	179	241
13	800	716	759	654	582	614	666	586	624	294	180	240
14	754	725	743	610	582	596	649	589	612	361	298	330
15	758	719	732	615	603	609	603	583	592	314	269	295
16	770	759	763	612	528	583	653	602	618	346	316	330
17	778	728	754	518	500	509	656	624	639	366	346	355
18	729	670	700	558	519	541	661	654	657	388	367	379
19	704	654	685	572	557	564	670	651	661	409	389	396
20	749	683	723	562	401	431	666	646	657	414	404	409
21	742	598	693	464	405	433	668	652	650	431	411	419
22	734	594	660	513	469	491	669	652	661	442	427	435
23	798	732	762	540	520	532	667	333	456	453	427	441
24	805	747	781	584	543	570	522	418	479	580	447	529
25	769	740	752	583	565	577	571	527	552	591	576	581
26	806	745	768	587	404	558	600	573	590	590	568	583
27	814	778	804	364	248	301	595	589	592	604	570	592
28	782	726	756	408	281	347	590	508	556	638	602	622
29	780	717	737	455	410	434	593	507	547	654	624	637
30	753	718	737	481	457	474	608	512	587	642	334	451
31	786	751	764	---	---	---	501	328	400	515	408	476
MONTH	847	254	707	767	248	556	670	328	575	654	179	429

02457595 FIVEMILE CREEK NEAR REPUBLIC, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	563	517	541	341	183	258	411	385	401	683	373	467
2	579	567	574	377	343	359	442	408	419	563	480	527
3	583	559	574	402	379	390	454	431	441	565	524	551
4	585	561	577	423	194	356	472	238	366	600	557	578
5	585	357	498	325	219	287	367	268	329	554	216	410
6	418	355	397	375	311	347	402	356	381	455	295	384
7	342	253	300	411	376	392	415	392	403	541	461	497
8	412	346	382	435	413	426	440	205	380	554	540	546
9	444	413	428	450	435	444	357	234	309	573	544	554
10	470	447	459	462	448	457	410	358	379	501	357	420
11	483	473	476	464	462	463	433	407	420	566	486	534
12	494	483	486	472	463	469	445	430	436	590	568	580
13	514	494	502	479	469	473	459	444	451	592	572	586
14	541	504	525	480	454	466	480	458	471	582	459	560
15	560	543	552	499	466	484	469	431	447	534	442	486
16	566	553	558	522	493	508	488	454	473	574	536	554
17	613	566	594	531	512	520	491	488	489	576	548	564
18	614	576	604	535	522	528	510	492	502	577	548	561
19	573	561	567	546	536	540	515	496	509	587	558	575
20	573	540	558	551	498	534	524	487	500	622	371	566
21	470	271	349	504	275	366	560	527	547	574	429	510
22	455	387	425	460	369	414	567	548	557	601	567	592
23	489	448	471	479	304	372	593	566	575	596	539	573
24	519	483	503	411	329	388	602	571	590	616	595	605
25	519	514	516	415	384	403	641	580	604	613	604	609
26	522	508	514	449	410	417	646	617	635	635	609	623
27	510	196	469	456	418	430	673	608	644	664	636	655
28	180	100	142	459	419	436	671	603	637	711	657	691
29	---	---	---	482	220	420	720	666	695	689	673	680
30	---	---	---	326	170	266	737	672	713	696	662	680
31	---	---	---	382	327	356	---	---	---	704	669	681
MONTH	614	100	484	551	170	418	737	205	490	711	216	561

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	705	652	683	---	---	---	650	608	639	732	584	686
2	665	639	651	---	---	---	694	633	665	568	339	417
3	706	658	681	---	---	---	683	640	658	660	476	575
4	681	615	651	---	---	---	729	675	702	732	664	698
5	617	505	589	---	---	---	712	692	703	767	733	750
6	484	206	330	451	418	434	735	699	713	765	675	710
7	587	453	536	476	422	448	696	612	650	706	668	686
8	601	256	500	479	320	412	700	639	680	671	618	642
9	520	265	412	515	425	477	722	688	709	675	617	644
10	579	525	561	533	519	527	751	705	730	657	595	642
11	590	467	553	525	469	495	705	661	689	687	410	499
12	552	458	512	563	521	543	684	656	668	555	440	492
13	595	553	579	589	567	578	682	666	672	600	517	575
14	601	479	584	607	579	596	693	629	678	588	424	544
15	423	312	384	580	562	573	658	571	622	460	398	420
16	513	399	468	611	583	600	682	628	657	539	462	505
17	578	515	545	611	589	601	648	626	641	582	542	562
18	615	580	597	633	594	612	641	626	633	621	583	597
19	617	335	425	605	496	539	652	627	638	644	622	633
20	510	395	451	570	358	453	680	651	666	675	642	654
21	420	306	369	626	512	570	678	662	670	726	189	607
22	---	---	---	676	442	607	692	649	665	341	207	260
23	---	---	---	657	543	605	712	663	677	403	286	353
24	---	---	---	659	627	648	726	696	715	486	407	446
25	---	---	---	635	597	617	711	696	704	524	141	435
26	---	---	---	636	608	625	727	699	716	499	272	402
27	---	---	---	655	631	643	753	710	733	574	505	537
28	---	---	---	670	634	657	763	739	752	600	574	582
29	---	---	---	703	666	685	774	670	749	608	161	429
30	---	---	---	698	669	685	664	538	594	380	269	343
31	---	---	---	689	636	663	696	635	670	---	---	---
MONTH	---	---	---	---	---	---	774	538	679	767	141	544

02457595 FIVEMILE CREEK NEAR REPUBLIC, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	22.1	20.8	21.4	16.5	14.0	15.1	11.0	8.6	9.7	12.2	11.0	11.8
2	21.4	20.5	20.9	15.7	12.3	13.9	10.2	7.6	8.7	11.4	10.2	10.8
3	21.4	19.8	20.7	16.7	13.1	14.9	10.2	6.8	8.4	13.2	11.2	12.2
4	19.6	17.4	18.5	16.8	15.1	15.8	10.6	7.6	8.9	11.5	8.9	10.2
5	17.9	15.4	16.7	16.5	14.9	15.8	9.9	6.9	8.3	9.7	7.9	8.9
6	17.1	13.9	15.5	15.2	12.6	14.0	10.0	6.7	8.2	13.3	9.8	11.8
7	17.2	14.3	15.6	14.3	10.8	12.6	11.3	8.5	9.7	14.9	12.2	13.6
8	16.5	13.4	14.9	15.7	13.6	14.7	11.4	8.8	10.2	15.0	12.0	13.8
9	16.3	13.4	14.8	16.9	14.9	15.8	11.0	8.5	10.2	11.8	9.2	10.2
10	17.1	14.3	15.6	17.5	15.6	16.6	9.1	7.3	8.3	11.4	9.2	10.2
11	17.3	14.0	15.6	15.4	12.8	14.2	9.0	7.7	8.6	12.0	11.0	11.3
12	16.0	13.5	14.8	15.0	11.8	13.4	8.6	6.6	7.5	13.6	12.0	12.9
13	14.7	11.8	13.3	16.7	14.1	15.1	8.5	5.4	6.8	13.4	11.5	12.1
14	14.4	10.9	12.6	15.1	12.5	13.9	9.3	5.6	7.5	12.5	11.6	11.9
15	14.9	11.2	12.9	17.0	14.2	15.5	10.4	9.2	9.8	12.4	11.2	11.9
16	15.7	12.1	13.9	17.5	16.2	16.8	9.4	5.9	8.0	11.7	10.1	10.9
17	17.7	14.1	15.7	16.0	12.0	14.4	6.9	4.4	5.5	10.5	8.3	9.4
18	18.7	15.5	17.0	13.6	10.1	12.1	6.6	3.5	4.9	10.6	8.1	9.4
19	18.7	16.1	17.7	16.2	13.5	14.6	7.5	3.9	5.7	11.3	9.2	10.4
20	15.7	13.6	14.5	18.1	15.0	16.9	10.7	6.5	8.6	12.2	10.0	11.3
21	16.4	14.7	15.4	14.8	12.5	13.8	12.7	10.4	11.5	10.5	8.2	9.2
22	15.8	13.2	14.5	13.5	11.1	12.2	14.4	12.0	13.2	10.5	7.1	8.6
23	15.7	12.1	13.9	14.1	12.3	13.1	14.3	13.3	13.9	10.6	7.1	8.8
24	16.6	14.2	15.2	13.9	11.0	12.3	15.2	13.1	14.3	11.6	8.7	10.0
25	15.4	12.0	13.6	14.6	11.3	12.8	12.8	9.6	11.4	12.5	8.7	10.4
26	14.2	12.8	13.5	16.4	13.6	14.9	10.9	7.9	9.4	12.7	9.8	11.3
27	17.2	13.7	15.1	16.1	13.7	15.4	13.0	9.3	11.0	13.7	10.3	12.3
28	16.4	14.8	15.6	13.4	10.8	12.2	13.0	9.8	12.1	12.3	8.5	10.4
29	17.8	15.4	16.4	11.5	9.3	10.4	9.6	7.4	8.5	13.0	9.5	11.3
30	16.7	14.6	15.7	12.7	10.1	11.0	9.7	7.8	8.7	14.3	12.1	13.0
31	15.2	14.5	14.8	---	---	---	12.1	9.8	10.8	13.6	10.2	11.8
MONTH	22.1	10.9	15.7	18.1	9.3	14.1	15.2	3.5	9.3	15.0	7.1	11.0
		FEBRUARY			MARCH			APRIL			MAY	
1	15.5	11.2	13.4	10.5	10.0	10.3	16.3	11.7	13.9	21.8	19.4	20.2
2	17.3	14.7	15.8	11.6	10.1	10.9	17.2	12.1	14.5	21.3	17.7	19.4
3	16.5	13.4	15.5	12.7	11.0	11.9	17.6	15.2	16.3	19.2	17.0	18.2
4	13.1	10.3	11.4	13.3	12.4	12.8	16.9	14.5	16.1	18.2	17.1	17.5
5	10.2	8.7	9.4	15.1	13.1	14.3	17.0	14.3	15.4	18.7	17.0	17.7
6	9.2	8.1	8.7	14.2	9.9	11.7	14.6	12.4	13.8	20.3	16.7	18.2
7	7.9	6.9	7.4	9.9	9.2	9.5	16.4	13.1	14.5	19.5	15.0	17.2
8	9.1	6.8	7.8	12.3	8.7	10.3	14.9	13.6	14.3	19.8	14.9	17.5
9	8.2	6.0	7.0	13.4	9.2	11.2	14.4	12.8	13.4	20.4	18.3	19.3
10	8.1	4.7	6.3	14.7	10.0	12.2	13.1	12.0	12.7	19.8	18.0	19.0
11	9.7	5.6	7.4	16.1	11.1	13.4	15.1	10.2	12.4	19.9	15.5	17.7
12	11.7	7.4	9.3	17.1	12.2	14.5	16.0	10.9	13.2	20.2	14.9	17.5
13	13.2	10.1	11.7	17.4	13.4	15.4	17.5	12.3	14.7	18.4	16.5	17.6
14	16.7	13.2	14.8	19.9	15.1	17.2	16.1	13.2	14.9	17.8	16.7	17.3
15	18.7	15.5	16.8	19.6	16.9	17.9	16.1	14.9	15.5	20.8	17.0	18.6
16	16.3	14.2	15.5	18.8	14.9	16.6	19.5	13.8	16.3	21.7	17.2	19.5
17	14.1	11.6	12.9	19.6	13.6	16.5	20.4	14.2	17.1	23.0	18.2	20.5
18	11.4	9.7	10.4	20.5	16.0	18.0	21.8	15.6	18.5	21.5	19.8	20.6
19	10.6	9.3	10.0	18.7	14.0	16.5	19.8	16.9	18.4	23.0	19.7	21.2
20	12.7	10.4	11.3	19.4	15.0	17.2	21.4	15.9	18.4	22.9	21.4	22.0
21	13.4	12.1	12.9	17.7	13.5	15.9	22.0	17.4	19.4	25.0	20.0	22.3
22	11.9	8.5	10.4	13.2	12.1	12.7	22.6	16.5	19.5	23.9	21.3	22.7
23	8.2	5.9	7.0	12.4	11.1	11.5	23.5	17.8	20.6	25.6	21.8	23.5
24	8.4	4.5	6.2	13.3	11.0	12.1	23.9	18.8	21.2	25.9	21.4	23.7
25	9.7	5.0	7.3	14.1	12.0	12.8	24.4	18.9	21.5	26.8	23.5	25.0
26	11.2	8.8	10.0	16.6	12.2	14.4	24.4	19.4	21.8	27.5	24.3	25.9
27	11.7	9.2	11.1	19.0	13.8	16.2	24.5	19.6	22.0	26.8	24.2	25.5
28	11.4	8.7	10.0	20.2	15.5	17.7	24.9	20.3	22.5	25.7	21.9	24.0
29	---	---	---	20.8	16.8	18.4	23.3	21.2	22.4	25.5	20.9	23.2
30	---	---	---	17.6	15.7	16.5	23.4	20.3	21.9	26.0	22.1	24.1
31	---	---	---	16.3	13.6	15.3	---	---	---	27.3	23.3	25.2
MONTH	18.7	4.5	10.6	20.8	8.7	14.3	24.9	10.2	17.2	27.5	14.9	20.7

02457595 FIVEMILE CREEK NEAR REPUBLIC, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	27.3	24.3	25.8	---	---	---	26.2	24.3	25.3	25.7	24.8	25.4
2	26.3	24.2	25.4	---	---	---	26.8	24.2	25.5	25.3	23.0	24.4
3	25.7	23.8	24.8	---	---	---	28.0	24.3	26.0	26.5	23.4	24.9
4	24.5	23.3	23.9	---	---	---	28.3	24.9	26.6	26.4	24.4	25.3
5	23.7	22.7	23.1	22.8	20.8	21.3	28.1	24.7	26.5	26.1	23.0	24.5
6	23.4	19.8	21.7	22.4	20.9	21.7	27.9	25.0	26.4	26.1	23.5	24.7
7	25.3	21.0	23.0	24.2	21.3	22.7	26.3	24.2	25.2	26.1	23.7	24.7
8	23.9	21.8	22.4	24.9	22.2	23.4	24.5	21.9	23.2	26.4	23.3	24.8
9	23.8	21.6	22.5	24.7	22.4	23.4	23.6	20.4	22.1	26.3	23.6	25.0
10	24.8	20.9	22.8	25.4	22.2	23.6	24.3	21.2	22.7	26.6	24.8	25.7
11	23.6	21.9	22.7	25.5	22.1	23.6	24.5	21.0	22.7	25.6	23.3	24.5
12	25.8	21.9	23.6	26.3	22.3	24.1	24.6	21.2	22.9	26.1	23.5	24.8
13	26.8	23.5	25.0	25.2	23.2	24.3	24.0	20.9	22.6	26.5	24.2	25.3
14	25.5	23.4	24.6	24.8	23.2	24.0	23.9	21.5	22.7	26.5	23.5	25.0
15	22.7	21.4	22.1	25.4	22.6	24.0	24.8	22.0	23.5	23.6	22.6	23.2
16	22.6	20.8	21.5	24.2	23.0	23.5	24.6	22.6	23.8	22.5	20.9	21.8
17	24.0	19.6	21.7	25.3	21.7	23.3	24.9	22.8	23.9	23.5	20.4	21.8
18	24.9	20.5	22.7	25.3	21.8	23.6	25.6	22.6	24.0	23.1	19.9	21.4
19	23.7	21.4	22.2	24.6	22.6	23.7	25.5	22.5	24.0	22.8	19.6	21.2
20	22.9	20.5	21.6	25.2	22.4	23.8	26.0	23.2	24.6	22.6	19.8	21.2
21	22.7	20.7	21.5	25.4	22.7	24.0	26.8	23.7	25.2	22.0	19.9	20.9
22	---	---	---	24.3	22.7	23.3	27.3	24.3	25.7	22.9	20.3	21.8
23	---	---	---	25.1	22.1	23.4	27.9	24.9	26.4	20.8	18.6	20.1
24	---	---	---	25.0	22.8	23.8	28.0	25.1	26.5	18.4	16.6	17.5
25	---	---	---	26.3	22.6	24.3	28.4	25.1	26.6	17.6	16.6	17.0
26	---	---	---	27.4	23.4	25.3	27.5	25.7	26.6	19.4	17.2	18.3
27	---	---	---	27.7	24.1	25.9	27.4	24.7	26.0	20.1	18.5	19.3
28	---	---	---	27.5	24.3	25.9	27.5	24.8	26.1	19.7	17.6	18.5
29	---	---	---	27.9	24.2	26.0	27.4	24.9	26.1	18.4	17.3	17.8
30	---	---	---	26.3	24.5	25.5	26.4	24.6	25.6	19.9	18.5	19.1
31	---	---	---	27.3	24.2	25.7	27.3	24.2	25.6	---	---	---
MONTH	---	---	---	---	---	---	28.4	20.4	24.9	26.6	16.6	22.3

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.8	6.9	7.2	11.5	8.3	9.3	9.7	8.8	9.2	10.6	9.9	10.2
2	7.2	6.8	7.0	11.6	7.9	9.3	10.0	9.1	9.4	11.6	10.2	10.7
3	7.4	6.8	7.1	11.5	7.1	8.9	10.1	9.1	9.5	10.6	10.0	10.2
4	8.1	7.0	7.5	9.0	6.9	7.6	9.9	9.0	9.3	11.8	10.3	10.9
5	9.0	7.7	8.3	8.4	8.2	8.3	10.1	9.1	9.5	12.3	10.4	11.3
6	9.3	8.1	8.6	9.1	8.3	8.6	10.3	9.1	9.5	11.1	9.6	10.3
7	9.3	8.1	8.5	9.4	8.4	8.9	10.1	8.8	9.3	11.5	9.2	10.1
8	9.5	8.1	8.6	8.7	8.1	8.4	10.3	8.7	9.3	10.3	9.1	9.7
9	9.8	8.1	8.7	8.8	7.6	8.2	10.5	8.6	9.4	11.2	9.9	10.7
10	10.0	7.9	8.7	8.4	7.4	7.9	11.0	9.1	9.8	11.1	10.4	10.9
11	10.0	7.9	8.6	10.0	7.7	8.6	10.8	9.0	9.6	10.7	10.2	10.5
12	11.3	8.0	9.2	10.3	7.5	8.8	11.4	9.3	10.0	10.1	9.6	10.0
13	11.7	8.6	9.7	9.6	7.8	8.3	11.3	9.5	10.1	10.7	10.0	10.4
14	11.8	8.9	9.9	11.1	7.7	9.0	11.5	9.0	10.0	10.5	9.8	10.2
15	12.6	8.6	9.9	10.9	7.2	8.6	10.7	8.8	9.4	10.0	9.5	9.8
16	12.8	8.5	9.9	9.7	7.1	8.0	11.5	8.8	9.8	10.4	9.8	10.0
17	13.0	8.0	9.7	10.0	7.6	8.4	12.0	9.7	10.5	10.8	10.0	10.3
18	11.7	7.4	9.0	11.0	7.9	9.1	12.3	10.0	10.8	10.7	9.7	10.2
19	9.6	7.3	8.0	8.5	7.5	7.9	12.4	9.8	10.7	10.4	9.5	9.9
20	10.0	7.3	8.5	8.1	7.3	7.7	12.3	9.0	10.4	10.2	9.4	9.7
21	9.6	7.7	8.2	9.1	8.2	8.6	11.4	8.5	9.5	10.9	9.8	10.3
22	10.4	7.7	8.6	9.3	8.6	8.9	12.0	8.2	9.4	11.0	10.1	10.5
23	10.6	7.6	8.7	9.0	8.4	8.7	8.8	8.1	8.5	11.3	9.9	10.6
24	10.4	7.4	8.4	9.4	8.5	8.8	9.4	8.3	8.7	---	---	---
25	11.0	8.1	9.1	9.4	8.3	8.8	11.3	8.7	9.7	---	---	---
26	10.4	8.2	9.0	8.7	7.8	8.2	12.1	9.6	10.4	---	---	---
27	11.1	8.0	9.1	8.4	7.8	8.0	12.3	9.1	10.2	---	---	---
28	9.9	8.0	8.6	9.0	8.4	8.7	11.2	8.9	9.6	---	---	---
29	11.0	7.7	8.8	9.5	8.9	9.1	12.9	9.5	10.8	---	---	---
30	11.7	7.6	9.2	9.2	8.6	8.9	11.6	10.0	10.5	---	---	---
31	9.4	8.1	8.6	---	---	---	10.3	9.9	10.2	---	---	---
MONTH	13.0	6.8	8.7	11.6	6.9	8.5	12.9	8.1	9.8	---	---	---

02457595 FIVEMILE CREEK NEAR REPUBLIC, AL--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	10.8	10.0	10.4	9.6	8.6	9.0	7.8	7.1	7.5
2	10.7	7.7	8.6	10.6	10.1	10.3	9.7	8.5	9.1	8.9	7.7	8.1
3	9.2	7.6	8.3	[illegible]	10.0	10.4	9.5	8.4	8.8	9.2	7.7	8.3
4	10.7	8.3	9.3	[illegible]	9.8	10.3	9.0	8.4	8.7	8.7	7.9	8.2
5	10.1	9.1	9.5	10.4	7.5	8.9	9.5	8.9	9.2	8.4	7.8	8.1
6	10.2	9.3	9.7	8.0	5.0	7.1	13.1	9.2	11.2	8.8	8.0	8.3
7	10.5	10.0	10.3	9.1	6.7	7.9	9.5	8.2	8.8	9.3	8.0	8.6
8	11.1	10.0	10.4	10.3	9.0	9.5	8.6	8.1	8.3	9.4	7.8	8.6
9	11.5	10.1	10.7	9.9	8.9	9.3	8.9	8.2	8.5	8.9	7.5	8.1
10	11.8	10.3	10.9	9.7	8.6	9.1	9.3	8.4	8.8	8.6	7.6	8.0
11	11.6	9.8	10.6	9.4	8.2	8.9	9.6	8.2	8.9	9.7	7.9	8.6
12	11.6	9.2	10.3	9.4	8.0	8.6	9.5	7.9	8.7	10.0	7.8	8.7
13	11.2	8.6	9.7	9.6	7.8	8.6	9.3	7.6	8.4	9.6	7.8	8.6
14	11.4	8.0	9.4	10.4	7.3	8.5	9.2	7.5	8.2	9.1	8.1	8.5
15	11.5	7.8	9.0	10.5	7.3	8.3	8.4	7.4	7.8	9.3	7.6	8.3
16	10.7	7.9	9.0	11.4	7.3	8.7	9.3	7.0	8.0	9.8	7.5	8.4
17	9.8	3.5	9.1	10.3	6.7	8.3	9.3	6.8	7.9	10.2	7.3	8.4
18	10.1	9.1	9.5	9.7	6.3	7.6	9.4	6.7	7.7	9.0	7.2	7.9
19	11.4	9.3	10.0	9.5	6.2	7.5	9.1	6.7	7.6	9.4	7.1	8.0
20	10.6	8.7	9.7	8.8	5.8	7.0	9.7	6.8	7.9	8.7	7.0	7.5
21	9.3	8.8	9.1	6.9	5.7	6.3	9.3	6.8	7.7	9.3	6.9	7.9
22	10.5	9.3	9.9	8.3	6.9	7.5	9.5	6.8	7.8	9.3	7.0	7.9
23	11.7	10.1	10.9	8.0	7.3	7.8	9.5	6.7	7.7	9.7	7.0	8.0
24	12.1	10.8	11.3	8.8	7.9	8.3	9.6	6.7	7.7	10.3	6.9	8.2
25	12.0	10.2	11.1	9.2	7.8	8.4	9.8	6.7	7.9	9.9	6.8	7.9
26	11.2	9.8	10.4	9.4	7.4	8.3	9.9	6.7	7.9	10.1	6.8	7.9
27	10.5	9.6	10.0	9.6	7.3	8.2	10.0	6.7	8.0	10.2	6.8	8.0
28	10.7	10.1	10.4	9.7	7.2	8.1	10.1	6.7	7.9	10.5	6.8	8.1
29	---	---	---	9.9	7.2	8.1	9.4	6.8	7.7	10.6	7.0	8.2
30	---	---	---	8.4	7.7	8.1	9.7	7.0	7.9	9.9	6.9	8.0
31	---	---	---	9.1	8.0	8.5	---	---	---	9.5	6.2	7.7
MONTH	---	---	---	11.4	5.0	8.5	13.1	6.7	8.3	10.6	6.2	8.1
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.2	6.3	7.4	---	---	---	10.3	6.3	7.7	8.9	6.8	7.5
2	9.6	6.4	7.4	---	---	---	10.1	6.2	7.6	7.8	5.6	7.2
3	9.5	6.5	7.5	---	---	---	10.2	6.1	7.7	8.9	6.5	7.5
4	9.1	6.7	7.6	---	---	---	10.2	5.4	7.1	9.9	6.9	8.0
5	8.1	6.9	7.4	---	---	---	10.1	5.9	7.3	14.9	7.6	9.6
6	7.9	6.8	7.5	7.9	7.3	7.5	9.9	6.0	7.2	10.2	7.2	8.5
7	8.4	7.1	7.7	7.9	7.0	7.5	9.2	6.2	7.3	13.0	6.7	8.8
8	7.9	7.1	7.5	7.5	7.0	7.2	10.4	6.5	7.9	11.1	6.5	8.1
9	7.9	7.0	7.5	8.3	6.8	7.4	10.7	7.0	8.4	9.6	6.1	7.4
10	7.0	5.8	6.7	8.8	6.9	7.6	11.5	7.2	8.6	8.3	5.5	6.6
11	5.7	4.9	5.4	9.8	6.8	7.8	11.1	7.2	8.5	6.4	5.4	5.9
12	5.2	4.6	4.9	10.2	6.6	7.9	10.8	7.1	8.4	6.6	5.1	5.8
13	5.0	4.4	4.7	9.9	6.5	7.7	10.6	7.1	8.4	8.1	5.1	6.1
14	4.9	4.3	4.8	10.4	6.5	7.9	10.2	7.2	8.1	7.4	5.3	5.9
15	4.7	4.1	4.4	11.4	6.4	8.3	9.1	6.6	7.7	7.6	5.9	6.4
16	4.3	4.0	4.1	9.6	6.3	7.4	10.7	5.7	8.0	6.9	6.0	6.4
17	5.1	4.4	4.8	10.9	6.7	8.1	10.8	7.1	8.4	8.0	6.1	6.8
18	4.8	4.6	4.7	11.2	6.8	8.4	12.1	7.2	8.9	8.6	6.4	7.3
19	4.9	4.4	4.6	10.0	6.7	7.8	12.1	7.2	8.9	9.5	6.4	7.5
20	4.5	4.3	4.4	8.9	6.4	7.2	12.0	7.0	8.6	11.1	7.2	8.7
21	4.4	4.3	4.3	10.1	6.1	7.6	10.5	6.7	8.0	9.9	7.2	8.2
22	---	---	---	8.6	6.0	6.9	10.1	6.6	7.8	7.8	7.3	7.5
23	---	---	---	10.0	6.2	7.4	10.2	6.5	7.7	7.9	7.6	7.7
24	---	---	---	9.7	6.2	7.3	9.8	6.4	7.5	8.7	7.9	8.2
25	---	---	---	9.9	6.2	7.4	9.6	6.4	7.5	8.7	8.0	8.4
26	---	---	---	10.2	6.1	7.5	9.6	6.4	7.5	8.5	7.5	8.2
27	---	---	---	10.2	6.1	7.4	10.3	6.6	7.8	8.8	8.2	8.5
28	---	---	---	9.8	6.1	7.4	10.4	6.6	7.8	8.8	8.3	8.6
29	---	---	---	10.2	6.0	7.5	10.2	6.6	7.8	8.8	8.3	8.7
30	---	---	---	9.1	6.0	7.4	8.4	6.6	7.2	8.4	7.8	8.0
31	---	---	---	10.3	6.3	7.8	9.8	6.5	7.7	---	---	---
MONTH	---	---	---	---	---	---	12.1	5.4	7.9	14.9	5.1	7.6

02458300 VILLAGE CREEK AT 24TH STREET AT BIRMINGHAM, AL
(Formerly Published as Village Creek at 24th Street in North Birmingham, Al)

LOCATION.--Lat 33°32'33", long 86°49'03", in NE¼ sec. 23, T. 17 S., R. 3 W., Jefferson County, Hydrologic Unit 031560111, on right upstream wingwall of 24th Street bridge, in Birmingham, and at mile 33.0.

DRAINAGE AREA.--26 mi².

PERIOD OF RECORD.--June 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 531.09 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Apr. 17 to May 3. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,490 ft³/s, Nov. 20, 1988, gage height, 10.85 ft; minimum daily discharge, 7.0 ft³/s, June 12, 1988.

EXTREMES FOR CURRENT YEAR.--May to September 1988: Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 12	1230	*3,930	*10.05				

Minimum discharge, 7.0 ft³/s, June 12.

Water year 1989: Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 20	0445	*4,490	*10.85	June 19	1815	3,480	9.36
May 20	1345	3,110	8.77	July 2	0630	3,610	9.56

Minimum daily discharge, 7.7 ft³/s, Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	12	11	12	10
2	---	---	---	---	---	---	---	---	11	39	10	9.8
3	---	---	---	---	---	---	---	---	9.4	16	21	97
4	---	---	---	---	---	---	---	---	7.9	36	13	218
5	---	---	---	---	---	---	---	---	7.3	30	10	28
6	---	---	---	---	---	---	---	---	8.7	14	8.9	17
7	---	---	---	---	---	---	---	---	8.8	12	127	14
8	---	---	---	---	---	---	---	---	9.3	11	19	13
9	---	---	---	---	---	---	---	---	9.1	11	12	12
10	---	---	---	---	---	---	---	---	8.0	12	13	27
11	---	---	---	---	---	---	---	---	7.4	60	61	17
12	---	---	---	---	---	---	---	---	7.0	21	16	544
13	---	---	---	---	---	---	---	---	8.2	12	11	41
14	---	---	---	---	---	---	---	---	8.9	11	11	22
15	---	---	---	---	---	---	---	---	9.1	11	11	18
16	---	---	---	---	---	---	---	---	11	27	12	488
17	---	---	---	---	---	---	---	---	8.8	11	10	164
18	---	---	---	---	---	---	---	---	42	10	9.9	62
19	---	---	---	---	---	---	---	---	11	10	15	38
20	---	---	---	---	---	---	---	---	8.4	10	74	61
21	---	---	---	---	---	---	---	---	20	37	84	29
22	---	---	---	---	---	---	---	---	14	39	98	21
23	---	---	---	---	---	---	---	---	37	15	21	19
24	---	---	---	---	---	---	---	---	36	9.9	54	17
25	---	---	---	---	---	---	---	---	13	10	15	23
26	---	---	---	---	---	---	---	---	30	30	12	16
27	---	---	---	---	---	---	---	---	16	70	11	13
28	---	---	---	---	---	---	---	---	11	22	13	13
29	---	---	---	---	---	---	---	---	12	37	14	162
30	---	---	---	---	---	---	---	---	12	17	12	28
31	---	---	---	---	---	---	---	---	---	13	11	---
TOTAL	---	---	---	---	---	---	---	---	414.3	674.9	821.8	2241.8
MEAN	---	---	---	---	---	---	---	---	13.8	21.8	26.5	74.7
MAX	---	---	---	---	---	---	---	---	42	70	127	544
MIN	---	---	---	---	---	---	---	---	7.0	9.9	8.9	9.8
CFSM	---	---	---	---	---	---	---	---	.53	.84	1.02	2.87
IN.	---	---	---	---	---	---	---	---	.59	.97	1.18	3.21

02458300 VILLAGE CREEK AT 24TH STREET AT BIRMINGHAM, AL--Continued

(Formerly Published as Village Creek at 24th Street in North Birmingham, Al)

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	338	15	28	61	22	67	46	e130	17	378	13	43
2	89	13	23	42	20	52	40	e25	15	887	14	36
3	40	12	21	102	27	44	39	e20	16	161	13	9.1
4	27	268	19	43	19	480	366	27	58	169	14	10
5	22	95	18	33	78	215	98	188	62	82	11	8.4
6	19	28	18	41	76	93	60	34	137	72	34	9.2
7	17	22	17	27	99	68	61	24	21	51	17	9.4
8	15	22	16	48	39	52	151	22	106	97	12	9.2
9	15	18	15	109	32	44	74	38	39	70	11	7.7
10	14	18	14	105	30	39	54	51	22	41	12	32
11	13	16	14	175	27	35	44	21	77	35	11	170
12	12	53	13	325	26	32	40	19	29	29	9.7	23
13	12	41	13	210	24	31	36	17	27	35	9.8	24
14	12	19	13	128	23	29	33	61	116	32	16	31
15	11	17	14	110	22	26	65	25	239	22	11	19
16	11	50	14	65	21	24	31	19	59	20	17	11
17	12	21	13	52	20	23	e28	17	34	21	11	10
18	30	18	14	43	38	22	e26	17	27	19	11	10
19	24	17	13	38	24	21	e32	17	347	20	9.8	9.6
20	22	719	11	33	35	38	e25	283	110	22	9.6	9.8
21	70	52	12	29	216	283	e23	30	403	20	11	227
22	15	35	11	26	40	61	e21	45	105	66	11	116
23	14	29	156	25	34	143	e20	24	62	37	11	54
24	21	24	29	23	29	57	e20	21	48	27	12	18
25	13	21	18	21	27	46	e19	19	40	17	14	256
26	13	100	17	21	26	39	e19	18	36	15	11	49
27	12	202	15	23	152	36	e18	17	34	15	11	26
28	31	63	43	20	366	33	e18	16	36	13	12	24
29	15	40	16	19	---	344	e17	14	30	21	11	313
30	12	33	47	99	---	138	e51	16	91	26	15	85
31	23	---	250	25	---	60	---	15	---	16	12	---
TOTAL	994	2081	935	2121	1592	2675	1575	1290	2443	2536	397.9	1659.4
MEAN	32.1	69.4	30.2	68.4	56.9	86.3	52.5	41.6	81.4	81.8	12.8	55.3
MAX	338	719	250	325	366	480	366	283	403	887	34	313
MIN	11	12	11	19	19	21	17	14	15	13	9.6	7.7
CFSM	1.23	2.67	1.16	2.63	2.19	3.32	2.02	1.60	3.13	3.15	.49	2.13
IN.	1.42	2.98	1.34	3.03	2.28	3.83	2.25	1.85	3.50	3.63	.57	2.37

WTR YR 1989 TOTAL 20299.3 MEAN 55.6 MAX 887 MIN 7.7 CFSM 2.14 IN. 29.04

e Estimated

02458450 VILLAGE CREEK AT AVE. W AT ENSLEY, AL
(Formerly Published as Village Creek at Ave. W in Ensley, AL)

LOCATION.--Lat 33°31'03", long 86°52'45", in NW¼ sec. 32, T. 17 S., R. 3 W., Jefferson County, Hydrologic Unit 03160111, near left bank on downstream side of Ave. "W" bridge over Village Creek, 5.7 mi upstream of Bay View Lake, 0.55 mi north of Interstate 59, in Ensley.

DRAINAGE AREA.--33.5 mi^2.

PERIOD OF RECORD.--July 1975 to Sept. 1979. July 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 505.16 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharge. Records good.

AVERAGE DISCHARGE.--5 years (water years 1976-79, 1989), 92.6 ft^3/s, 37.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,730 ft^3/s, Sept. 7, 1977, gage height, 13.26 ft; minimum, daily discharge, 13 ft^3/s, Aug. 27, Sept. 2, 1988.

EXTREMES FOR CURRENT PERIOD.--July to Sept. 1988: Peak discharge greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 12	1400	*3,450	*9.03				

Minimum daily discharge, 13 ft^3/s, Aug. 27, Sept. 2.

Water year 1989: Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 20	0545	*4,070	*10.03	July 2	0815	3,470	9.06
June 19	1915	3,030	8.32				

Minimum discharge, 15 ft^3/s, May 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	16	14
2	---	---	---	---	---	---	---	---	---	---	16	13
3	---	---	---	---	---	---	---	---	---	---	144	101
4	---	---	---	---	---	---	---	---	---	---	30	284
5	---	---	---	---	---	---	---	---	---	---	19	31
6	---	---	---	---	---	---	---	---	---	---	17	23
7	---	---	---	---	---	---	---	---	---	---	182	21
8	---	---	---	---	---	---	---	---	---	17	28	17
9	---	---	---	---	---	---	---	---	---	16	21	17
10	---	---	---	---	---	---	---	---	---	17	19	24
11	---	---	---	---	---	---	---	---	---	46	56	19
12	---	---	---	---	---	---	---	---	---	25	23	601
13	---	---	---	---	---	---	---	---	---	19	18	52
14	---	---	---	---	---	---	---	---	---	17	17	33
15	---	---	---	---	---	---	---	---	---	18	16	29
16	---	---	---	---	---	---	---	---	---	137	17	780
17	---	---	---	---	---	---	---	---	---	20	17	221
18	---	---	---	---	---	---	---	---	---	18	16	69
19	---	---	---	---	---	---	---	---	---	18	27	45
20	---	---	---	---	---	---	---	---	---	17	68	80
21	---	---	---	---	---	---	---	---	---	31	78	44
22	---	---	---	---	---	---	---	---	---	38	94	33
23	---	---	---	---	---	---	---	---	---	24	21	30
24	---	---	---	---	---	---	---	---	---	17	37	28
25	---	---	---	---	---	---	---	---	---	17	17	32
26	---	---	---	---	---	---	---	---	---	23	15	26
27	---	---	---	---	---	---	---	---	---	68	13	24
28	---	---	---	---	---	---	---	---	---	35	14	24
29	---	---	---	---	---	---	---	---	---	49	16	178
30	---	---	---	---	---	---	---	---	---	21	14	37
31	---	---	---	---	---	---	---	---	---	19	16	---
TOTAL	---	---	---	---	---	---	---	---	---	---	1102	2930
MEAN	---	---	---	---	---	---	---	---	---	---	35.5	97.7
MAX	---	---	---	---	---	---	---	---	---	---	182	780
MIN	---	---	---	---	---	---	---	---	---	---	13	13
CFSM	---	---	---	---	---	---	---	---	---	---	1.06	2.92
IN.	---	---	---	---	---	---	---	---	---	---	1.22	3.25

02458450 VILLAGE CREEK AT AVE. W AT ENSLEY, AL--Continued
(Formerly Published as Village Creek at Ave. W in Ensley, AL)

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	520	22	41	99	36	85	91	212	77	504	21	73
2	98	20	38	77	32	66	81	34	83	1510	21	78
3	48	19	37	136	39	59	76	26	100	349	21	20
4	38	402	34	79	30	693	528	37	216	351	21	20
5	36	161	33	66	99	308	187	280	231	153	19	17
6	34	40	32	75	90	143	115	59	340	117	47	18
7	28	33	32	62	139	102	113	36	37	77	27	19
8	27	31	30	83	54	87	226	28	242	178	19	19
9	26	27	30	145	45	77	136	31	106	124	18	20
10	24	27	29	150	41	70	100	73	35	56	18	71
11	24	25	30	241	38	65	79	24	182	81	19	294
12	22	55	28	429	37	62	72	22	42	59	18	35
13	21	63	27	308	34	59	69	20	36	56	18	53
14	20	27	27	154	33	56	63	82	214	59	21	44
15	22	26	28	146	32	53	112	33	628	29	20	49
16	24	64	27	82	30	52	61	21	145	29	25	22
17	23	32	25	65	29	50	53	19	59	28	21	18
18	31	27	26	57	48	49	49	18	42	25	19	19
19	37	29	26	47	35	49	56	18	553	25	20	18
20	28	983	24	47	45	60	48	384	149	28	20	18
21	86	67	25	43	297	416	43	41	774	24	20	378
22	24	50	25	40	56	114	37	51	222	157	21	295
23	23	45	233	37	48	226	35	26	103	44	21	134
24	28	44	61	35	43	106	32	21	75	64	22	33
25	21	42	48	34	40	89	30	19	54	24	24	437
26	21	104	45	33	39	80	30	17	48	21	21	102
27	19	322	44	35	141	74	29	16	44	21	19	41
28	35	80	71	31	616	69	27	15	42	26	20	35
29	24	52	44	31	---	433	25	17	34	21	22	472
30	19	46	69	132	---	292	51	21	153	48	25	182
31	28	---	337	38	---	115	---	24	---	23	23	---
TOTAL	1459	2965	1606	3037	2246	4259	2654	1725	5066	4311	671	3034
MEAN	47.1	98.8	51.8	98.0	80.2	137	88.5	55.6	169	139	21.6	101
MAX	520	983	337	429	616	693	528	384	774	1510	47	472
MIN	19	19	24	31	29	49	25	15	34	21	18	17
CFSM	1.40	2.95	1.55	2.92	2.39	4.10	2.64	1.66	5.04	4.15	.65	3.02
IN.	1.62	3.29	1.78	3.37	2.49	4.73	2.95	1.92	5.63	4.79	.75	3.37

WTR YR 1989 TOTAL 33033 MEAN 90.5 MAX 1510 MIN 15 CFSM 2.70 IN. 36.68

02461500 VALLEY CREEK NEAR BESSEMER, AL

LOCATION.--Lat 33°25'09", long 86°58'58", in NE¼ sec. 5, T. 19 S., R. 4 W., Jefferson County, Hydrologic Unit 03160112, near left bank on downstream side of 19th Street bridge, 1.0 mi downstream from Opossum Creek, 2.0 mi west of Bessemer, at mile 40.13.

DRAINAGE AREA.--52.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1946 to December 1947 (gage heights and discharge measurements only). May 1974 to May 1975 (rainfall-runoff site, flood hydrograph only). June 1975 to September 1979. May 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage 438.64 ft National Geodetic Vertical Datum of 1929 (levels by Jefferson County Highway Department). May 2, 1974 to May 14, 1975, rainfall-runoff site at same site and datum.

REMARKS.--Estimated daily discharges: Mar. 20, 21. Water discharge records good.

AVERAGE DISCHARGE.--5 years (water years 1976-79, 1989), 165 ft^3/s, 42.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s, Apr. 13, 1979, gage height, 17.06 ft; minimum daily discharge, 23 ft^3/s, July 25, 1988.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--Flood in February 1936 reached a stage of 18.6 ft present site and datum (discharge not determined), from high-water marks.

EXTREMES FOR CURRENT PERIOD.--April to September 1988: Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 16	1615	*3,620	*12.18				

Minimum daily discharge, 23 ft^3/s, July 25.

Water year 1989: Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 1	1900	4,020	12.50	June 19	2100	4,140	12.59
Nov. 20	0745	*6,330	*14.23	July 2	0915	4,150	12.60
Mar. 4	2030	5,110	13.33				

Minimum daily discharge, 34 ft^3/s, Oct. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	47	38	43	34	31
2	---	---	---	---	---	---	---	46	36	54	32	26
3	---	---	---	---	---	---	---	47	37	81	31	231
4	---	---	---	---	---	---	---	56	34	79	67	563
5	---	---	---	---	---	---	---	47	33	209	26	72
6	---	---	---	---	---	---	---	43	32	48	31	42
7	---	---	---	---	---	---	---	41	34	40	166	40
8	---	---	---	---	---	---	---	40	33	34	75	34
9	---	---	---	---	---	---	---	44	34	28	25	34
10	---	---	---	---	---	---	---	198	33	33	25	53
11	---	---	---	---	---	---	---	48	36	43	47	44
12	---	---	---	---	---	---	---	44	36	103	42	290
13	---	---	---	---	---	---	---	42	36	35	25	59
14	---	---	---	---	---	---	---	44	34	51	27	41
15	---	---	---	---	---	---	---	42	34	98	24	36
16	---	---	---	---	---	---	---	43	39	574	27	624
17	---	---	---	---	---	---	---	45	42	62	28	508
18	---	---	---	---	---	---	---	43	42	40	28	134
19	---	---	---	---	---	---	---	44	67	37	28	70
20	---	---	---	---	---	---	---	43	33	31	135	56
21	---	---	---	---	---	---	---	39	37	46	77	105
22	---	---	---	---	---	---	---	43	64	47	52	44
23	---	---	---	---	---	---	---	57	36	68	48	45
24	---	---	---	---	---	---	---	111	80	27	63	42
25	---	---	---	---	---	---	---	56	92	23	37	45
26	---	---	---	---	---	---	---	43	40	40	27	43
27	---	---	---	---	---	---	---	40	45	38	29	40
28	---	---	---	---	---	---	---	37	33	133	31	41
29	---	---	---	---	---	---	---	30	40	37	31	169
30	---	---	---	---	---	---	---	30	49	29	28	75
31	---	---	---	---	---	---	---	30	---	55	33	---
TOTAL	---	---	---	---	---	---	---	1563	1259	2266	1379	3637
MEAN	---	---	---	---	---	---	---	50.4	42.0	73.1	44.5	121
MAX	---	---	---	---	---	---	---	198	92	574	166	624
MIN	---	---	---	---	---	---	---	30	32	23	24	26
CFSM	---	---	---	---	---	---	---	.96	.80	1.39	.85	2.31
IN.	---	---	---	---	---	---	---	1.11	.89	1.61	.98	2.58

02461500 VALLEY CREEK NEAR BESSEMER, AL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	877	49	74	157	63	148	109	402	52	216	63	88
2	195	44	68	98	59	110	94	62	61	2110	55	97
3	85	42	64	179	63	96	93	57	56	442	63	49
4	62	361	60	96	61	1390	793	65	108	301	53	45
5	54	365	59	82	129	602	298	383	205	155	56	45
6	45	72	58	82	107	254	137	91	290	125	55	46
7	42	61	59	71	263	153	132	69	64	103	76	43
8	44	61	55	87	90	119	216	61	184	333	52	42
9	37	55	51	163	76	103	172	62	106	198	50	46
10	43	63	54	220	78	91	110	77	67	118	48	69
11	37	59	48	320	72	87	97	58	137	272	47	324
12	40	55	48	632	63	79	88	56	76	167	46	125
13	36	168	48	658	64	73	81	55	86	201	46	66
14	34	60	50	249	61	74	77	115	278	270	56	61
15	41	52	49	304	60	71	118	80	1130	105	53	66
16	35	104	50	135	58	68	78	57	191	85	136	48
17	36	68	47	112	59	65	68	55	105	77	67	44
18	39	53	42	98	70	62	69	51	84	73	53	43
19	118	53	46	90	68	60	66	55	754	77	49	44
20	46	1870	48	86	71	70	67	332	208	71	47	43
21	100	136	47	77	457	650	61	74	1100	68	46	220
22	48	92	46	73	90	165	60	64	391	198	49	611
23	44	77	354	68	78	354	61	64	182	86	45	142
24	46	71	78	68	72	138	53	54	119	106	46	68
25	42	64	59	63	68	108	56	53	98	66	50	407
26	45	91	53	59	66	93	56	50	86	222	92	171
27	41	597	52	65	98	85	55	49	82	123	63	84
28	52	165	96	57	1100	81	55	51	77	69	48	82
29	60	95	57	55	---	573	52	46	74	73	47	374
30	44	86	80	179	---	602	56	50	376	153	47	290
31	48	---	796	69	---	145	---	51	---	71	47	---
TOTAL	2516	5189	2796	4752	3664	6769	3528	2849	6827	6734	1751	3883
MEAN	81.2	173	90.2	153	131	218	118	91.9	228	217	56.5	129
MAX	877	1870	796	658	1100	1390	793	402	1130	2110	136	611
MIN	34	42	42	55	58	60	52	46	52	66	45	42
CFSM	1.55	3.29	1.72	2.92	2.49	4.16	2.24	1.75	4.33	4.14	1.08	2.47
IN.	1.78	3.68	1.98	3.37	2.60	4.80	2.50	2.02	4.84	4.77	1.24	2.75

CAL YR 1988 TOTAL 30840 MEAN 84.3 MAX 1870 MIN 23 CFSM 1.60 IN. 21.85
WTR YR 1989 TOTAL 51258 MEAN 140 MAX 2110 MIN 34 CFSM 2.67 IN. 36.32

02461500 VALLEY CREEK NEAR BESSEMER, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1988 to September 1989.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1988 to September 1989.
WATER TEMPERATURE: September 1988 to September 1989.
DISSOLVED OXYGEN: September 1988 to September 1989.

INSTRUMENTATION.--Water-quality monitor since September 1988.

REMARKS.--Interruptions in the daily record were due to malfunctions of the instrument.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 781 microsiemens, July 26; minimum, 74 microsiemens, Sept. 22.
WATER TEMPERATURE: Maximum, 31.6°C, Aug. 5, 6; minimum, 5.3°C, Feb. 24.
DISSOLVED OXYGEN: Maximum, 12.4 mg/L, Jan. 29; minimum, 0.7 mg/L, Aug. 24.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	496	311	412
2	---	---	---	---	---	---	---	---	---	552	502	523
3	---	---	---	---	---	---	---	---	---	544	408	489
4	---	---	---	---	---	---	---	---	---	532	440	483
5	---	---	---	---	---	---	---	---	---	596	536	561
6	---	---	---	---	---	---	---	---	---	616	590	600
7	---	---	---	---	---	---	619	534	581	670	616	642
8	---	---	---	---	---	---	660	528	590	779	672	733
9	---	---	---	---	---	---	635	568	601	712	387	578
10	---	---	---	---	---	---	---	---	---	425	386	411
11	---	---	---	---	---	---	---	---	---	513	365	430
12	---	---	---	---	---	---	---	---	---	464	168	378
13	621	510	570	---	---	---	---	---	---	414	204	316
14	569	498	531	---	---	---	---	---	---	514	420	473
15	590	504	540	---	---	---	---	---	---	554	514	535
16	602	471	542	---	---	---	687	552	603	612	553	583
17	559	453	516	---	---	---	612	514	568	612	591	605
18	657	505	575	---	---	---	638	580	602	622	611	617
19	525	341	405	---	---	---	623	547	586	613	601	607
20	566	412	483	---	---	---	641	511	574	616	611	614
21	496	317	409	---	---	---	644	501	578	640	618	626
22	472	336	429	---	---	---	661	524	598	645	634	639
23	514	473	488	---	---	---	628	192	354	640	615	627
24	546	520	531	---	---	---	466	347	416	618	567	599
25	557	485	507	---	---	---	509	465	488	604	568	583
26	585	531	548	---	---	---	517	507	511	608	553	576
27	586	508	548	---	---	---	534	500	516	601	537	560
28	600	522	577	---	---	---	559	385	481	628	520	575
29	---	---	---	---	---	---	461	393	422	623	557	590
30	---	---	---	---	---	---	486	457	476	578	265	404
31	---	---	---	---	---	---	447	147	288	527	408	467
MONTH	---	---	---	---	---	---	---	---	---	779	168	543

02461500 VALLEY CREEK NEAR BESSEMER, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	582	522	546	503	415	463	531	475	504	486	149	291
2	631	552	598	557	509	535	529	506	514	586	397	498
3	663	545	615	635	553	583	519	494	505	636	582	606
4	606	552	589	687	151	489	502	151	363	669	612	647
5	589	314	481	432	269	361	475	201	371	599	167	420
6	483	336	412	455	319	412	516	464	489	522	303	419
7	422	245	327	502	459	475	513	478	492	545	502	527
8	501	415	466	518	489	504	547	265	479	586	538	560
9	533	503	520	545	509	526	463	278	382	625	592	610
10	567	537	549	552	540	545	502	460	481	591	488	514
11	577	534	556	542	502	526	515	492	499	538	481	504
12	578	548	569	---	---	---	557	516	533	534	478	496
13	573	534	551	---	---	---	625	553	579	546	524	534
14	556	539	548	---	---	---	643	581	607	542	348	502
15	547	518	529	---	---	---	580	451	494	444	307	378
16	557	517	528	---	---	---	571	508	539	509	431	478
17	576	544	553	---	---	---	593	548	576	549	495	516
18	572	522	555	---	---	---	597	486	524	580	525	546
19	519	491	506	---	---	---	547	498	520	608	517	564
20	505	470	486	---	---	---	526	500	514	588	130	425
21	493	168	302	---	---	---	571	485	522	443	279	385
22	493	386	455	563	431	486	538	474	507	521	436	486
23	523	494	512	584	350	439	506	458	479	520	468	498
24	537	515	527	631	478	568	542	485	521	528	503	514
25	552	519	526	655	619	640	540	495	513	541	518	531
26	585	551	562	667	643	656	563	510	545	550	530	542
27	616	343	581	752	658	694	548	511	527	585	549	570
28	412	121	275	739	702	716	560	507	529	605	493	546
29	---	---	---	725	162	609	548	519	534	553	519	537
30	---	---	---	438	177	334	571	483	547	525	467	509
31	---	---	---	481	445	468	---	---	---	539	465	512
MONTH	663	121	508	---	---	---	643	151	506	669	130	505
		JUNE			JULY			AUGUST			SEPTEMBER	
1	554	504	529	408	182	322	498	435	459	501	432	485
2	528	369	470	255	87	181	531	488	515	424	297	341
3	524	455	481	447	253	367	610	565	573	525	393	441
4	525	312	481	463	359	423	596	562	570	516	459	484
5	381	279	323	489	357	406	560	537	552	573	439	488
6	388	206	293	545	486	514	676	506	528	569	418	469
7	602	393	456	522	485	501	502	460	483	554	456	497
8	625	281	460	637	268	523	465	452	457	582	476	493
9	441	301	380	533	258	416	532	466	491	534	434	466
10	522	429	458	567	526	543	520	499	508	476	394	435
11	549	318	470	566	216	494	525	509	516	453	193	314
12	491	322	404	444	274	373	526	513	522	768	417	511
13	498	412	469	433	281	368	630	513	525	523	388	455
14	525	178	476	475	225	388	516	477	507	486	452	467
15	347	151	257	556	333	449	526	483	488	447	408	428
16	494	342	435	622	564	604	517	256	438	506	399	428
17	510	486	496	598	571	585	509	341	432	497	431	456
18	571	498	524	577	515	544	580	513	549	498	450	467
19	574	91	457	594	489	512	631	515	553	529	460	492
20	501	229	404	521	509	517	589	520	541	601	460	474
21	388	165	276	508	479	496	558	505	513	535	105	486
22	478	278	399	548	233	430	581	481	510	338	74	232
23	487	334	434	524	266	397	553	478	517	416	269	342
24	533	470	503	614	518	556	713	560	580	503	412	453
25	538	517	526	712	623	670	658	588	600	484	151	327
26	543	523	531	781	264	654	689	362	500	405	224	322
27	543	480	512	602	328	481	528	381	445	523	411	466
28	504	462	488	727	610	670	740	504	561	508	477	492
29	504	456	478	---	---	---	524	494	501	438	181	330
30	496	197	414	659	313	547	646	491	518	418	250	340
31	---	---	---	433	319	371	536	489	497	---	---	---
MONTH	625	91	443	---	---	---	740	256	514	768	74	429

02461500 VALLEY CREEK NEAR BESSEMER, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	13.9	12.3	13.3
2	---	---	---	---	---	---	---	---	---	13.6	11.5	12.5
3	---	---	---	---	---	---	---	---	---	15.4	13.2	14.1
4	---	---	---	---	---	---	---	---	---	13.4	11.3	12.3
5	---	---	---	---	---	---	---	---	---	11.3	10.0	10.7
6	---	---	---	---	---	---	---	---	---	15.8	11.3	13.9
7	---	---	---	---	---	---	13.5	11.5	12.6	17.4	14.6	16.2
8	---	---	---	---	---	---	14.0	11.5	12.9	17.3	13.7	15.8
9	---	---	---	---	---	---	13.9	11.1	12.5	13.4	10.0	11.3
10	---	---	---	---	---	---	---	---	---	12.4	9.9	11.1
11	---	---	---	---	---	---	---	---	---	13.0	12.3	12.6
12	---	---	---	---	---	---	---	---	---	14.7	13.0	13.9
13	18.3	15.0	16.6	---	---	---	---	---	---	14.4	12.2	13.1
14	18.2	14.2	16.1	---	---	---	---	---	---	13.6	12.3	12.8
15	18.9	15.1	16.9	---	---	---	---	---	---	13.5	12.0	12.8
16	19.4	15.6	17.4	---	---	---	11.7	9.1	10.2	13.3	11.1	12.1
17	21.1	16.9	18.9	---	---	---	9.0	7.7	8.3	12.5	9.8	11.2
18	22.3	18.8	20.4	---	---	---	8.3	5.9	7.3	13.1	9.8	11.4
19	21.4	19.1	20.1	---	---	---	9.5	6.9	8.3	13.3	11.3	12.3
20	19.2	16.9	17.6	---	---	---	12.0	9.3	10.7	14.4	12.5	13.4
21	18.0	16.3	17.1	---	---	---	14.4	12.0	13.2	12.3	9.6	11.2
22	19.3	15.7	17.2	---	---	---	16.5	14.3	15.4	12.4	9.0	10.8
23	18.8	15.4	17.1	---	---	---	16.6	14.3	15.2	13.0	9.2	11.2
24	19.3	16.7	17.8	---	---	---	16.7	15.0	15.8	13.9	10.9	12.5
25	18.4	15.2	16.8	---	---	---	14.7	12.4	13.4	15.0	11.0	13.1
26	17.4	16.0	16.6	---	---	---	12.7	10.1	11.6	15.2	12.4	13.9
27	20.0	16.3	17.8	---	---	---	14.6	11.3	12.9	15.8	13.7	14.8
28	19.8	18.2	18.9	---	---	---	14.8	12.3	14.2	15.0	11.1	13.1
29	---	---	---	---	---	---	11.9	9.5	10.8	15.5	11.9	13.9
30	---	---	---	---	---	---	11.7	10.7	11.2	16.1	14.2	15.1
31	---	---	---	---	---	---	13.9	11.4	12.3	16.1	12.5	14.3
MONTH	---	---	---	---	---	---	---	---	---	17.4	9.0	12.9
		FEBRUARY			MARCH			APRIL			MAY	
1	17.9	14.1	15.9	11.9	11.1	11.5	18.9	13.3	15.9	23.3	19.9	21.0
2	19.9	16.9	18.2	12.7	11.1	11.9	19.4	14.0	16.5	23.5	18.6	20.9
3	18.6	15.1	17.8	14.4	12.3	13.3	18.9	16.7	17.7	21.1	18.6	20.1
4	14.8	12.2	13.2	14.7	13.7	14.2	18.5	16.4	17.6	19.7	18.3	18.8
5	12.0	9.6	10.8	16.9	14.2	15.7	19.0	15.5	16.9	19.7	17.8	18.6
6	10.5	8.3	9.9	15.4	10.3	12.4	16.1	13.8	15.2	22.6	18.4	20.1
7	8.6	7.1	8.0	10.3	9.8	10.1	18.3	13.8	15.9	22.3	17.1	19.6
8	10.9	7.3	9.0	14.5	9.4	11.7	16.1	14.8	15.4	22.2	17.3	19.8
9	10.1	7.0	8.6	16.2	11.0	13.4	15.3	13.6	14.2	21.9	20.1	21.0
10	10.7	6.1	8.5	17.5	12.1	14.7	14.0	12.7	13.4	22.1	19.6	20.6
11	12.1	7.9	10.1	18.9	13.5	15.9	16.6	10.8	13.5	22.6	17.8	20.0
12	14.2	9.6	12.0	---	---	---	18.1	12.3	14.9	23.0	17.7	20.2
13	15.6	12.6	14.0	---	---	---	19.5	14.0	16.6	20.7	19.1	20.0
14	19.2	15.2	17.1	---	---	---	17.9	15.2	16.8	19.6	18.2	19.1
15	21.2	17.8	19.4	---	---	---	18.1	16.3	17.3	23.2	18.1	20.3
16	19.3	16.7	18.3	---	---	---	21.4	15.6	18.2	23.6	19.2	21.5
17	16.4	13.1	14.9	---	---	---	22.3	16.1	19.2	25.2	20.5	22.8
18	12.9	10.3	12.0	---	---	---	23.8	17.6	20.6	23.7	22.0	22.6
19	12.0	10.1	11.1	---	---	---	21.8	19.1	20.7	25.3	21.3	23.1
20	13.8	11.4	12.2	---	---	---	23.2	17.9	20.5	24.0	20.7	22.6
21	14.9	13.4	14.1	---	---	---	24.1	19.0	21.5	27.0	21.1	23.6
22	13.3	9.4	11.7	14.1	12.6	13.3	24.3	18.8	21.7	25.3	22.8	24.1
23	9.0	7.0	8.1	13.3	11.5	12.1	25.4	20.1	22.8	27.7	23.0	25.0
24	10.0	5.3	7.7	14.7	12.3	13.5	25.3	20.5	22.9	28.2	23.6	25.8
25	11.6	6.8	9.4	15.8	13.5	14.5	25.9	21.0	23.4	28.6	25.0	26.7
26	12.8	10.4	11.5	19.1	13.7	16.3	26.0	21.3	23.6	29.4	25.4	27.1
27	13.2	10.8	12.8	21.4	15.9	18.5	26.4	21.8	24.0	28.9	25.8	27.1
28	13.0	8.9	10.8	22.4	17.9	20.0	27.2	22.3	24.6	28.8	24.3	26.3
29	---	---	---	22.4	17.3	20.1	25.4	22.6	24.2	27.6	23.0	25.3
30	---	---	---	19.6	16.9	18.0	25.0	22.3	23.7	28.2	23.9	26.1
31	---	---	---	18.3	15.0	17.1	---	---	---	29.6	25.2	27.1
MONTH	21.2	5.3	12.4	---	---	---	27.2	10.8	19.0	29.6	17.1	22.5

02461500 VALLEY CREEK NEAR BESSEMER, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	30.5	26.0	27.9	25.4	23.5	24.4	29.3	26.4	27.7	28.5	27.2	27.9
2	28.3	26.0	26.9	24.7	22.0	23.2	29.5	26.3	27.7	28.2	25.6	26.9
3	27.8	25.1	26.1	23.8	22.2	22.9	30.2	26.1	28.1	29.5	25.3	27.3
4	26.1	23.4	24.9	24.3	22.0	23.0	31.3	26.6	28.7	28.5	26.0	27.2
5	24.2	23.2	23.6	24.5	22.6	23.5	31.6	27.2	29.1	28.6	24.7	26.4
6	25.0	20.9	23.0	25.2	23.0	24.0	31.6	27.3	29.0	29.0	24.9	26.6
7	26.9	22.1	24.4	26.5	23.5	24.9	28.4	26.0	27.2	28.1	24.6	26.2
8	25.0	22.3	23.3	27.6	23.5	25.0	27.2	23.8	25.3	29.4	24.6	26.6
9	25.3	22.0	23.4	27.0	23.5	24.9	26.1	23.0	24.5	29.6	25.3	27.2
10	26.8	22.5	24.5	27.2	23.5	25.3	27.1	23.7	25.2	29.3	26.6	27.7
11	24.9	23.0	23.5	27.7	23.8	25.1	26.7	23.5	25.0	27.2	23.6	25.4
12	26.7	22.5	24.3	28.4	23.5	25.4	27.8	23.5	25.5	27.6	24.9	26.1
13	27.9	23.6	25.6	26.6	23.9	25.4	27.8	23.5	25.5	28.9	25.0	26.6
14	27.8	22.6	25.5	25.6	24.5	25.0	27.3	24.1	25.5	28.7	25.8	26.8
15	22.6	22.0	22.2	27.2	24.0	25.4	27.8	24.8	26.1	26.4	24.2	25.3
16	24.1	21.6	22.5	26.0	24.6	25.1	26.8	23.8	25.1	24.6	22.7	23.6
17	25.9	20.8	23.2	27.5	23.2	25.2	27.7	23.9	25.6	25.6	21.8	23.6
18	26.8	22.0	24.2	27.4	23.7	25.6	28.6	24.8	26.5	25.1	16.9	23.3
19	25.1	22.2	23.8	27.7	24.8	26.1	28.7	25.2	26.9	24.8	21.8	23.3
20	25.0	21.7	22.9	28.3	25.0	26.5	29.2	25.4	27.1	25.3	22.2	23.5
21	23.9	21.0	22.4	28.2	25.1	26.6	29.5	25.6	27.5	25.0	22.1	23.4
22	23.3	21.9	22.6	26.3	24.2	25.2	30.5	26.7	28.4	24.4	20.9	20.8
23	25.3	20.8	23.0	27.3	23.7	25.1	31.2	27.0	28.8	22.4	20.0	21.8
24	25.4	22.9	24.1	26.9	24.3	25.3	31.1	27.1	28.9	19.6	17.7	18.7
25	27.0	23.2	24.9	28.6	24.3	26.5	30.7	27.1	28.8	18.8	16.8	17.8
26	28.5	24.3	26.1	29.2	24.3	26.9	31.2	26.9	28.8	21.2	17.8	19.5
27	28.3	24.5	26.3	30.0	25.1	27.2	30.5	26.3	28.0	21.9	19.7	20.8
28	28.3	24.9	26.4	30.0	25.8	27.9	30.8	26.9	28.7	21.5	19.0	20.2
29	28.0	24.6	26.2	30.6	26.4	28.4	30.8	27.3	28.8	19.5	18.0	18.7
30	27.2	24.4	25.6	28.9	26.7	27.7	29.5	27.2	28.3	21.6	19.5	20.5
31	---	---	---	30.2	25.6	27.7	29.9	26.2	28.0	---	---	---
MONTH	30.5	20.8	24.1	30.6	22.0	25.5	31.6	23.0	27.2	29.6	16.8	24.0

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	7.1	5.8	6.5
2	---	---	---	---	---	---	---	---	---	7.6	6.4	6.9
3	---	---	---	---	---	---	---	---	---	6.5	5.5	6.0
4	---	---	---	---	---	---	---	---	---	7.2	5.5	6.3
5	---	---	---	---	---	---	---	---	---	7.5	6.1	6.8
6	---	---	---	---	---	---	---	---	---	7.1	5.3	6.1
7	---	---	---	---	---	---	10.2	7.6	8.6	7.0	4.9	5.7
8	---	---	---	---	---	---	10.8	7.2	8.6	6.3	4.8	5.4
9	---	---	---	---	---	---	11.1	7.1	8.8	7.1	5.4	6.4
10	---	---	---	---	---	---	---	---	---	7.2	6.1	6.9
11	---	---	---	---	---	---	---	---	---	6.7	6.0	6.3
12	---	---	---	---	---	---	---	---	---	6.6	5.6	6.1
13	10.3	5.1	6.8	---	---	---	---	---	---	7.1	6.3	6.6
14	10.4	5.2	7.2	---	---	---	---	---	---	7.0	6.2	6.5
15	10.3	5.1	6.7	---	---	---	---	---	---	7.1	6.5	6.8
16	9.8	5.0	6.6	---	---	---	11.9	6.0	8.3	7.4	6.7	7.0
17	9.6	4.4	6.1	---	---	---	11.7	6.7	8.7	7.9	6.8	7.3
18	9.0	3.9	5.5	---	---	---	11.9	7.4	9.0	7.9	6.9	7.3
19	5.1	2.5	3.8	---	---	---	11.6	6.8	8.4	7.8	6.5	7.0
20	5.6	3.5	4.4	---	---	---	11.4	5.6	7.8	8.2	6.4	7.1
21	5.4	3.7	4.6	---	---	---	9.9	5.2	6.9	9.2	6.8	7.8
22	5.9	4.0	4.8	---	---	---	9.9	4.4	6.2	9.8	7.5	8.3
23	6.4	3.9	4.8	---	---	---	5.1	2.7	4.2	10.3	7.2	8.4
24	6.5	3.6	4.6	---	---	---	5.2	2.7	4.1	10.2	6.6	8.0
25	7.3	3.8	4.9	---	---	---	6.7	4.8	5.6	11.0	6.1	7.8
26	6.0	3.3	4.3	---	---	---	8.0	5.6	6.7	10.1	5.6	7.4
27	7.2	3.5	4.7	---	---	---	8.3	5.5	6.5	11.5	5.2	7.6
28	6.0	3.2	4.2	---	---	---	6.9	4.9	5.6	11.8	5.9	8.1
29	---	---	---	---	---	---	8.7	5.2	6.7	12.4	5.8	8.2
30	---	---	---	---	---	---	7.4	6.0	6.6	6.5	4.8	5.7
31	---	---	---	---	---	---	6.8	5.7	6.3	8.7	5.4	6.6
MONTH	---	---	---	---	---	---	---	---	---	12.4	4.8	6.9

02461500 VALLEY CREEK NEAR BESSEMER, AL--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.8	5.0	6.2	8.0	7.3	7.6	9.0	7.2	8.0	---	---	---
2	8.6	3.7	5.4	8.1	7.2	7.5	9.2	7.1	8.0	6.9	5.3	5.9
3	6.3	3.9	4.9	7.8	6.3	7.2	8.2	6.8	7.4	7.4	5.2	6.1
4	7.9	4.7	5.9	7.4	5.7	6.5	7.7	4.9	6.6	6.6	5.3	5.9
5	8.1	5.7	6.5	6.8	6.0	6.4	8.0	6.9	7.5	6.4	5.6	6.0
6	7.5	6.6	7.0	7.5	6.2	6.9	8.4	7.0	7.7	7.0	5.7	6.1
7	8.2	7.5	7.8	7.5	7.2	7.4	8.2	6.1	7.3	7.7	5.7	6.5
8	8.6	7.3	7.8	7.4	6.4	7.0	7.1	5.7	6.5	8.1	5.7	6.7
9	9.0	7.3	8.0	7.1	6.0	6.6	7.9	6.4	7.1	6.8	5.6	6.1
10	9.4	7.0	8.1	6.9	5.8	6.2	8.3	6.6	7.6	7.9	5.5	6.5
11	9.4	6.9	7.7	6.9	4.6	5.9	9.0	7.0	7.9	8.4	5.4	6.7
12	10.0	6.4	7.8	---	---	---	9.0	6.9	7.8	9.8	5.5	7.1
13	9.5	5.6	7.0	---	---	---	9.6	5.9	7.6	8.9	5.2	6.7
14	10.0	5.2	7.0	---	---	---	9.4	6.3	7.6	7.6	5.2	6.4
15	9.4	4.5	6.3	---	---	---	7.5	6.0	6.7	8.2	5.6	6.5
16	8.8	3.9	5.8	---	---	---	9.7	6.0	7.5	8.9	5.3	6.7
17	7.0	4.4	5.5	---	---	---	10.2	6.1	7.7	9.8	5.1	6.8
18	6.9	4.9	6.0	---	---	---	9.9	4.8	7.1	8.5	4.1	6.1
19	8.0	5.7	6.7	---	---	---	8.4	4.4	5.9	8.5	3.6	5.4
20	8.1	5.3	6.4	---	---	---	8.9	4.6	6.2	5.5	3.3	4.2
21	6.1	3.7	5.1	---	---	---	9.1	4.3	6.1	5.5	3.9	4.7
22	7.8	5.8	7.1	8.5	6.5	7.7	9.2	4.2	6.1	5.5	3.7	4.3
23	9.4	7.6	8.5	9.0	7.2	8.3	8.6	4.1	5.8	5.6	3.3	4.4
24	9.8	8.3	9.0	8.9	7.7	8.3	9.7	3.8	6.0	5.3	3.0	3.8
25	9.6	7.7	8.7	8.9	7.3	8.0	9.1	3.7	5.7	6.1	3.0	4.0
26	8.6	7.2	7.7	9.1	6.5	7.8	9.0	3.4	5.4	6.5	3.0	4.2
27	8.8	6.8	7.3	8.9	6.2	7.2	9.1	3.3	5.5	6.1	3.0	4.1
28	8.8	7.3	8.1	8.9	5.9	7.0	9.4	3.0	5.3	6.5	3.0	4.3
29	---	---	---	8.6	5.6	6.6	8.8	2.8	5.1	6.8	3.1	4.4
30	---	---	---	7.4	6.4	6.9	7.9	2.9	4.6	6.5	2.1	4.1
31	---	---	---	8.5	6.2	7.2	---	---	---	6.3	2.0	3.7
MONTH	10.0	3.7	7.0	---	---	---	10.2	2.8	6.7	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.6	2.0	3.7	6.9	4.9	5.6	8.2	2.9	4.6	2.9	.8	1.5
2	6.0	1.9	3.2	7.0	5.5	6.3	9.1	2.7	5.1	2.4	.8	1.6
3	5.5	2.4	3.3	6.7	5.8	6.2	8.8	2.7	5.1	3.1	1.0	1.7
4	4.6	2.4	3.2	6.7	5.1	5.9	10.2	2.1	5.0	3.4	1.1	1.9
5	3.7	2.6	3.1	6.5	5.1	5.7	9.9	1.9	4.7	4.0	1.0	2.0
6	4.0	3.2	3.6	6.6	5.2	5.8	9.9	1.6	4.1	4.4	1.0	2.1
7	4.6	3.2	3.8	6.6	4.9	5.6	6.4	1.6	3.6	4.3	1.1	2.2
8	4.4	3.3	3.7	7.7	4.0	5.7	8.4	1.8	4.2	5.1	1.1	2.5
9	4.6	3.7	4.1	6.0	3.9	4.8	8.7	2.0	4.5	5.0	1.1	2.4
10	5.2	3.7	4.3	6.3	3.9	4.9	8.6	1.6	4.3	4.9	1.3	2.5
11	5.0	3.6	4.2	7.1	4.1	5.1	8.6	1.7	4.2	2.9	1.3	2.4
12	5.2	4.0	4.5	7.8	3.7	5.4	9.5	1.6	4.2	3.3	2.1	2.6
13	5.6	3.9	4.5	6.6	4.5	5.3	9.0	1.7	4.4	3.6	2.7	3.0
14	5.6	4.0	4.6	6.6	3.9	5.0	8.6	1.7	3.8	3.8	2.6	3.0
15	5.7	5.1	5.4	6.8	4.5	5.4	6.1	2.0	3.6	3.6	3.0	3.2
16	5.9	5.3	5.6	7.0	4.3	5.2	5.6	2.0	3.3	4.2	3.1	3.5
17	6.1	5.5	5.8	8.9	4.4	6.1	4.1	1.7	2.8	4.8	3.2	3.8
18	6.5	5.5	6.0	10.5	4.1	6.4	4.2	1.3	2.5	5.0	3.3	3.9
19	6.9	5.5	6.0	9.5	3.6	5.7	5.0	1.1	2.5	5.3	3.4	4.1
20	6.7	6.1	6.3	10.8	3.1	6.0	5.5	1.1	2.5	5.7	3.5	4.3
21	6.9	6.5	6.7	10.2	2.6	5.3	5.5	1.0	2.4	5.8	3.7	4.4
22	7.0	6.5	6.7	7.4	2.4	4.1	4.4	1.0	2.2	5.4	4.6	4.9
23	7.4	5.7	6.8	6.4	3.6	4.6	4.6	.9	2.1	5.1	4.7	4.9
24	7.2	5.7	6.3	6.7	3.6	4.7	4.4	.7	2.0	5.7	5.0	5.3
25	8.3	5.5	6.7	7.6	3.2	4.8	3.8	.8	1.9	6.2	5.2	5.6
26	9.9	5.2	6.9	8.4	3.0	4.9	3.1	1.3	2.0	5.8	5.4	5.7
27	11.5	4.8	7.3	5.7	3.5	4.4	2.8	1.0	1.8	6.0	4.8	5.4
28	7.7	2.1	4.9	6.5	2.9	4.2	3.2	.8	1.7	5.8	4.7	5.3
29	7.6	1.8	4.6	7.3	2.6	4.5	3.6	.9	1.8	6.2	5.4	5.8
30	7.6	1.4	4.8	7.0	2.4	4.2	3.7	.8	1.6	6.0	4.9	5.6
31	---	---	---	6.4	2.6	4.1	3.7	.8	1.8	---	---	---
MONTH	11.5	1.4	5.0	10.8	2.4	5.2	10.2	.7	3.2	6.2	.8	3.6

02462000 VALLEY CREEK NEAR OAK GROVE, AL

LOCATION.--Lat 33°26'50", long 87°07'20", in NW¼ sec. 25, T. 18 S., R. 6 W., Jefferson County, Hydrologic Unit 03160112, near center of span on downstream side of highway bridge, 1,000 ft downstream from Raccoon Branch, 1.5 mi east of Oak Grove, 10.5 mi west of Bessemer, and 18.2 mi upstream from mouth.

DRAINAGE AREA.--148 mi².

PERIOD OF RECORD.--May to July 1936, August 1953 to September 1958, October 1958 to September 1964 (peak discharge only), October 1964 to September 1965, October 1965 to May 1978 (peak discharge only), June 1978 to current year.

REVISED RECORDS.--WDR AL-83-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 294.87 ft above National Geodetic Vertical Datum of 1929 (levels by Jefferson County Highway Department). May 16 to July 12, 1936, chain gage at site 500 ft downstream at same datum. August 1953 to September 1958, water-stage recorder, October 1958 to September 1964 and October 1965 to June 1978, crest-stage gage, at present site and datum.

REMARKS.--Estimated daily discharges: Oct. 8 to Nov. 3, Apr. 4-10. Records good except those for periods of estimated record, which are fair. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--17 years (water years 1954-58, 1965, 1979-89) 325 ft³/s, 29.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,000 ft³/s, Dec. 4, 1983, gage height, 33.98 ft; minimum discharge, 30 ft³/s, Sept. 19, 20, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1916 reached a stage of 29.6 ft present site and datum (discharge not determined) from high-water marks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 20	1345	5,670	14.40	July 2	1700	6,300	15.79
Mar. 5	0300	*7,070	*17.44				

Minimum discharge, 96 ft³/s, Oct. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	376	e150	315	982	239	907	594	442	144	1410	185	132
2	921	e140	278	536	223	640	483	226	159	3470	174	220
3	261	e130	251	527	217	528	420	170	180	2260	167	136
4	208	134	233	504	218	1220	e1600	163	174	1030	165	120
5	177	889	216	399	236	3680	e1200	405	327	814	151	118
6	155	260	208	371	323	1630	e450	402	643	621	149	124
7	142	210	201	334	693	796	e500	222	280	566	173	124
8	e135	189	191	320	471	616	e720	189	275	502	148	118
9	e125	209	183	348	370	508	e600	178	420	990	138	115
10	e130	216	175	683	323	426	e550	319	263	519	134	130
11	e115	225	171	828	303	380	499	228	297	466	131	411
12	e110	192	163	954	267	346	441	194	427	663	129	178
13	e100	298	162	2640	252	305	385	175	319	748	125	224
14	e96	210	160	1060	234	285	339	181	300	532	122	147
15	e115	196	156	1100	239	267	390	330	2610	487	161	164
16	e105	195	152	674	213	247	332	209	1470	349	139	135
17	e100	264	146	546	201	237	283	188	639	311	260	126
18	e105	197	136	462	208	224	271	173	463	286	148	120
19	e210	190	137	397	235	212	247	167	415	279	137	123
20	e165	2670	142	362	220	205	236	352	945	263	127	119
21	e190	646	138	319	957	867	220	371	2250	242	121	118
22	e150	424	139	289	511	628	205	211	1390	243	126	597
23	e130	339	446	265	365	907	193	218	941	399	137	441
24	e125	293	365	250	309	746	182	189	630	299	125	180
25	e120	255	386	234	278	566	178	172	506	236	127	691
26	e130	245	281	222	260	466	169	164	408	229	148	668
27	e120	899	260	220	261	394	167	156	357	439	338	295
28	e140	779	280	205	2640	356	160	151	335	230	144	325
29	e160	462	259	192	---	396	155	143	389	220	137	853
30	e130	372	237	359	---	2450	150	144	522	188	138	889
31	e140	---	1240	285	---	816	---	148	---	275	137	---
TOTAL	5386	11878	7807	16867	11266	22251	12319	6980	18478	19566	4741	8141
MEAN	174	396	252	544	402	718	411	225	616	631	153	271
MAX	921	2670	1240	2640	2640	3680	1600	442	2610	3470	338	889
MIN	96	130	136	192	201	205	150	143	144	188	121	115
CFSM	1.17	2.68	1.70	3.68	2.72	4.85	2.77	1.52	4.16	4.26	1.03	1.83
IN.	1.35	2.99	1.96	4.24	2.83	5.59	3.10	1.75	4.64	4.92	1.19	2.05

CAL YR 1988 TOTAL 78796 MEAN 215 MAX 2670 MIN 65 CFSM 1.45 IN. 19.81
WTR YR 1989 TOTAL 145680 MEAN 399 MAX 3680 MIN 96 CFSM 2.70 IN. 36.62

e Estimated

02462500 BLACK WARRIOR RIVER AT BANKHEAD LOCK AND DAM, NEAR BESSEMER, AL

LOCATION.--Lat 33°27'30", long 87°21'15", in SE¼ sec. 22, T. 18 S., R. 8 W., Jefferson County, Hydrologic Unit 03160112, at abandoned lock wall 300 ft above dam, 1.9 mi downstream from Big Yellow Creek, 23 mi northwest of Bessemer, and at mile 153.6.

DRAINAGE AREA.--3,979 mi².

PERIOD OF RECORD.--October 1928 to September 1936, October 1976 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 173.5 ft above National Geodetic Vertical Datum of 1929.

COOPERATION.--Records were provided by Alabama Power Company.

AVERAGE DISCHARGE.--21 years, 6,455 ft³/s, 22.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 143,000 ft³/s, Apr. 13, 1979; maximum gage height, 82.10 ft, Jan. 11, 1984; no flow at times most years; some undetermined amounts of leakage may have occurred during periods reported as no flow.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 67,000 ft³/s, Jan. 13; maximum gage height, 82.09 ft, July 2; no flow, Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5660	300	8430	27000	8690	56200	10400	3380	2020	5000	3310	1880
2	10100	180	8560	16100	8700	37400	9750	1440	2680	50000	2800	300
3	8080	360	8570	12600	8710	27900	9850	1320	180	52100	2660	240
4	6820	1910	8500	18800	8630	26100	18500	4690	180	41700	3210	1950
5	6050	10400	2440	9360	8310	36400	51500	3220	3740	27600	3140	2500
6	4440	5080	1520	9550	21900	46200	34000	12600	4090	19900	1980	2430
7	3730	5080	2600	8420	22600	33900	19700	8540	3270	13000	2370	1930
8	240	3810	2300	7970	20200	24400	18600	6660	3280	12400	2880	1410
9	600	4570	1910	11600	15600	19200	14300	4920	4820	11400	1340	2460
10	3200	4830	1800	19800	8600	19100	15000	5770	3100	9630	2910	1850
11	3800	5030	6010	31400	9750	16600	11000	3840	3030	12500	2220	2240
12	5300	3480	5120	46100	8570	17900	11500	2740	4310	11800	300	4350
13	4280	3660	4100	67000	8850	17400	8480	3000	4540	12500	410	3100
14	3730	120	4360	58700	8210	14700	7750	1640	6220	14900	2700	1880
15	1580	2100	3530	44900	7900	13900	7560	3070	21700	12400	2520	2470
16	750	3120	4730	28100	8100	10300	5480	2680	29400	9550	2410	470
17	170	2870	4060	20400	8750	8690	4840	3320	23900	14100	2540	410
18	180	400	3760	16100	7540	9540	7760	3760	10200	15000	1900	2440
19	300	1690	4500	12400	7260	8910	5170	2940	16200	10800	350	2340
20	180	14900	3590	10300	7130	8440	4850	2120	29200	9200	0	1710
21	180	12200	3280	12000	20400	15300	3650	470	23900	9620	1540	2140
22	240	8370	3350	9580	25600	11600	3820	3620	25600	8000	1980	1980
23	410	8320	6000	8250	13700	13400	720	3110	27000	5150	1970	5670
24	300	6480	6270	8680	9960	14700	3380	2430	19400	4410	1550	5180
25	240	5520	5350	7450	9650	11300	2960	2570	12600	4200	1350	2700
26	120	5730	5110	6570	9430	9560	2160	1440	12300	4910	410	5620
27	420	23100	5180	7320	9480	8180	1770	350	9000	4330	350	2750
28	3780	17500	5950	7540	58500	8880	180	350	8260	4050	1460	4410
29	410	10400	5980	7330	---	8740	530	240	7500	2430	2970	15000
30	180	8180	6700	8760	---	26300	1330	1840	6000	350	2690	8690
31	1920	---	12000	8810	---	15300	---	1490	---	2610	1780	---
TOTAL	77390	179690	155560	568890	370720	596440	296490	99560	327620	415540	60000	92500
MEAN	2496	5990	5018	18350	13240	19240	9883	3212	10920	13400	1935	3083
MAX	10100	23100	12000	67000	58500	56200	51500	12600	29400	52100	3310	15000
MIN	120	120	1520	6570	7130	8180	180	240	180	350	0	240
CFSM	.63	1.51	1.26	4.61	3.33	4.84	2.48	.81	2.74	3.37	.49	.77
IN.	.72	1.68	1.45	5.32	3.47	5.58	2.77	.93	3.06	3.88	.56	.86

CAL YR 1988 TOTAL 1264675 MEAN 3455 MAX 31400 MIN 60 CFSM .87 IN. 11.82
WTR YR 1989 TOTAL 3240400 MEAN 8878 MAX 67000 MIN 0 CFSM 2.23 IN. 30.29

02462501 BLACK WARRIOR RIVER BELOW BANKHEAD LOCK AND DAM, NEAR BESSEMER, AL

LOCATION.--Lat 33°27'25", long 87°21'18", in SE¼ sec. 22, T. 18 S., R. 8 W., Jefferson County, Hydrologic Unit 03160112, near left bank 300 ft below dam, 2.0 mi downstream from Big Yellow Creek, 23 mi northwest of Bessemer, and at mile 153.6.

DRAINAGE AREA.--3,981 mi^2.

PERIOD OF RECORD.--December 1911 to current year (gage height only). October 1971 to current year in reports of Geological Survey. December 1911 to September 1971 in files of U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR AL-85-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 11, 1963, nonrecording gage at same site and datum. July 11, 1963 to September 30, 1976, at datum 173.50 ft lower.

EXTREMES (0700) FOR PERIOD OF RECORD.--Maximum gage height, 194.00 ft, July 9, 1916; minimum, 179.60 ft, Oct. 15 to Nov. 1, 1920.

EXTREMES (0700) FOR CURRENT WATER YEAR.--Maximum gage height, 187.59 ft, Apr. 5; minimum, 185.71 ft, July 23.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186.14	186.55	186.23	186.49	186.31	187.17	186.71	185.89	186.08	186.69	186.37	186.72
2	187.03	186.67	186.37	186.16	186.21	186.76	186.65	186.19	186.01	187.04	186.34	186.62
3	186.20	186.91	186.33	186.14	186.10	186.97	186.87	186.36	185.99	187.35	186.34	186.26
4	186.21	186.53	186.34	186.82	185.83	186.73	186.78	186.32	186.23	187.27	186.37	186.75
5	185.87	187.27	186.62	186.89	185.93	186.77	187.59	186.24	186.38	186.89	186.45	186.35
6	186.22	186.48	186.53	186.61	187.53	186.87	186.96	186.85	186.46	186.79	186.27	185.99
7	186.15	186.39	186.10	186.38	186.49	187.00	186.79	186.59	186.16	186.46	186.17	186.22
8	186.22	186.43	186.32	186.67	186.78	186.96	186.96	186.44	186.06	136.71	186.39	186.63
9	186.38	186.18	186.46	186.53	186.79	186.57	186.81	186.50	186.44	186.67	186.18	186.68
10	186.73	186.72	186.28	186.32	186.87	186.87	186.81	186.07	186.30	186.37	186.20	186.30
11	186.33	186.57	186.55	186.72	186.72	186.90	186.79	186.28	186.21	186.68	186.20	186.37
12	186.41	186.29	186.07	186.73	186.52	186.45	186.74	186.52	185.95	186.79	186.19	186.33
13	186.60	185.99	186.18	187.42	186.22	186.77	186.55	186.33	186.47	186.45	187.28	186.61
14	185.82	186.11	186.46	187.21	186.46	186.57	186.56	186.68	186.52	186.34	186.84	186.10
15	185.85	186.37	186.21	187.28	186.42	186.41	186.37	186.21	187.00	186.87	185.97	186.21
16	185.87	186.85	186.16	186.89	185.96	186.35	186.75	186.74	187.09	186.88	186.22	186.15
17	186.36	186.54	186.19	186.69	186.01	186.91	186.69	186.50	187.24	186.15	186.26	186.65
18	186.81	186.64	186.19	186.54	185.72	186.59	186.46	186.10	186.53	186.52	186.39	186.41
19	186.49	186.84	186.69	186.52	186.43	187.07	186.31	186.26	186.86	186.68	186.30	186.17
20	186.85	187.28	186.69	186.45	186.68	186.70	186.22	186.10	186.88	186.30	186.75	186.42
21	186.11	186.62	186.41	186.90	186.65	186.36	186.39	186.70	186.77	186.74	186.43	186.52
22	186.49	186.53	186.53	186.63	187.14	186.90	186.59	186.12	186.29	186.61	186.45	186.39
23	186.55	186.16	186.77	186.78	186.58	186.35	186.40	186.31	186.87	185.71	186.80	186.81
24	186.62	185.87	186.34	186.51	186.78	186.66	186.54	186.03	187.12	186.09	186.70	186.49
25	186.68	186.35	186.18	186.27	186.91	186.48	186.45	186.07	186.78	186.17	186.39	185.90
26	186.78	186.52	186.36	186.15	186.70	186.50	186.31	185.88	186.83	186.41	186.52	186.30
27	186.95	186.27	186.42	185.81	186.65	186.49	186.06	186.11	186.68	186.25	186.44	186.12
28	186.57	186.72	186.11	186.01	187.49	187.05	186.11	186.11	186.53	187.29	186.28	186.31
29	186.01	186.34	186.01	186.40	---	186.55	185.82	186.31	186.27	186.14	186.50	187.03
30	186.28	186.66	186.30	186.39	---	187.03	186.38	186.35	186.15	186.42	186.25	186.17
31	186.47	---	186.17	187.04	---	186.26	---	186.35	---	186.68	186.12	---
MEAN	186.39	186.52	186.34	186.59	186.53	186.71	186.58	186.31	186.50	186.59	186.40	186.40
MAX	187.03	187.28	186.77	187.42	187.53	187.17	187.59	186.85	187.24	187.35	187.28	187.03
MIN	185.82	185.87	186.01	185.81	185.72	186.26	185.82	185.88	185.95	185.71	185.97	185.90

CAL YR 1988 MEAN 186.23 MAX 187.28 MIN 184.69
WTR YR 1989 MEAN 186.49 MAX 187.59 MIN 185.71

02462951 BLACK WARRIOR RIVER AT HOLT LOCK AND DAM, NEAR HOLT, AL

LOCATION.--Lat 33°15'11", long 87°26'57", in NW¼ sec. 2, T. 21 S., R. 9 W., Tuscaloosa County, Hydrologic Unit 03160112, on left bank 50 ft upstream from lock and dam, 0.1 mi downstream from Jim Mack Branch, 0.7 mi upstream from Hurricane Creek, 2.0 mi northeast of Holt, 3.2 mi upstream from North River, and at mile 135.1.

DRAINAGE AREA.--4,219 mi².

PERIOD OF RECORD.--October 1976 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

COOPERATION.--Records were provided by Alabama Power Company.

AVERAGE DISCHARGE.--13 years, 7,065 ft³/s, 22.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 178,000 ft³/s, Apr. 13, 1979; maximum gage height, 190.19 ft, Dec. 3, 1983; no flow at times most years; some undetermined amounts of leakage may have occurred during periods reported as no flow.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 81,500 ft³/s, Jan. 13; maximum gage height, 187.45 ft, Jan. 18; minimum daily discharge, 150 ft³/s, Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5870	350	9220	34500	9380	69600	14000	3920	2330	5560	4990	2430
2	12400	200	9390	22300	9380	50100	12200	1450	2830	65200	3440	670
3	9320	1080	9190	17400	9440	36700	12200	1310	250	68100	3340	200
4	7360	2740	9280	24800	9280	36200	24500	5590	200	55200	4470	2720
5	6850	11400	3320	10300	9330	52200	66900	3810	4510	38600	3400	3280
6	4950	6260	1800	11100	28500	60200	46300	14700	4870	26300	2950	2650
7	3840	5830	3260	9670	29100	45100	27100	10700	3860	15400	3120	2130
8	300	4330	2590	9450	27400	33000	26400	7220	3580	16200	3370	1590
9	250	4630	2090	14600	19700	27400	20400	5390	5730	15300	1690	2680
10	3550	5950	1980	25900	9760	24000	19100	6280	3600	11900	3640	2420
11	4430	5690	6790	41500	11100	23500	15900	4390	4070	15700	2900	2980
12	5390	4400	5230	61000	9510	23000	14200	2730	5100	15500	250	5320
13	4830	3970	4450	81500	9380	22200	10500	3490	5130	14700	250	3520
14	4280	400	4970	72900	9390	19100	8840	2200	7010	18800	4640	2070
15	1670	1990	4010	62200	8930	16400	8170	3720	29600	16000	2960	2750
16	150	5370	5100	40600	9190	14000	6300	2990	39400	12000	2870	200
17	300	3880	4330	29000	9340	9740	5320	3870	29700	17700	2670	930
18	400	990	3810	22200	8270	9870	8720	4280	12900	17000	2730	3360
19	250	2830	4840	18600	7860	9630	6150	3400	21000	14700	350	2630
20	1230	20000	4470	12100	7630	10400	5330	1940	41200	11200	920	2060
21	250	14800	3910	14600	29700	19800	4050	1370	32800	10500	2200	2790
22	350	9430	4070	11000	35700	17800	4010	3850	35000	9510	2330	2530
23	300	9230	6980	9910	17600	18400	660	3510	36600	7070	2550	6420
24	350	7590	6920	9390	12500	19600	3980	2510	25400	5000	2740	5950
25	460	5690	6530	9140	11100	15800	3840	3320	14900	5250	1670	3130
26	300	6850	4860	7880	10800	10800	2550	1650	16100	5570	950	6330
27	1440	41600	6160	7030	11600	9430	2180	250	10600	4610	1060	3390
28	4240	21800	7120	8210	76200	9910	640	300	9220	5300	2330	6630
29	200	11600	6440	7940	---	12500	300	400	9380	2700	3820	22300
30	300	9290	7170	9650	---	39000	1740	2700	6800	250	3060	11000
31	2120	---	18000	9790	---	20600	---	1620	---	4450	1930	---
TOTAL	87930	230170	178280	726160	457070	785980	382480	114860	423670	531270	79590	117060
MEAN	2836	7672	5751	23420	16320	25350	12750	3705	14120	17140	2567	3902
MAX	12400	41600	18000	81500	76200	69600	66900	14700	41200	68100	4990	22300
MIN	150	200	1800	7030	7630	9430	300	250	200	250	250	200
CFSM	.67	1.82	1.36	5.55	3.87	6.01	3.02	.88	3.35	4.06	.61	.92
IN.	.78	2.03	1.57	6.40	4.03	6.93	3.37	1.01	3.74	4.68	.70	1.03

CAL YR 1988 TOTAL 1457610 MEAN 3983 MAX 41600 MIN 50 CFSM .94 IN. 12.85
WTR YR 1989 TOTAL 4114520 MEAN 11270 MAX 81500 MIN 150 CFSM 2.67 IN. 36.28

02462952 BLACK WARRIOR RIVER BELOW HOLT LOCK AND DAM, NEAR HOLT, AL

LOCATION.--Lat 33°15'10", long 87°27'05", in NW¼ sec. 2, T. 21 S., R. 9 W., Tuscaloosa County, Hydrologic Unit 03160112, at downstream end of lock, 0.2 mi downstream from Jim Mack Branch, 0.6 mi upstream from Hurricane Creek, 2.0 mi northeast of Holt, 3.1 mi upstream from North River, and at mile 135.0.

DRAINAGE AREA.--4,219 mi².

PERIOD OF RECORD.--July 1966 to current year (gage heights only). October 1971 to current year in reports of Geological Survey. July 1966 to September 1971 in files of U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

EXTREMES (0700) FOR PERIOD OF RECORD.--Maximum gage height, 156.87 ft, Dec. 3, 1983; minimum gage height, 121.0 ft, July 13, 1974.

EXTREMES (0700) FOR CURRENT YEAR.--Maximum gage height, 137.09 ft, Jan. 13; minimum gage height, 122.75 ft, Apr. 30 and Oct. 20.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123.23	123.42	125.92	129.66	126.25	135.68	127.22	124.18	123.18	123.37	123.36	123.12
2	126.20	123.04	126.12	128.70	125.87	132.38	126.15	123.27	123.41	127.23	123.54	123.28
3	125.87	122.80	125.84	127.04	125.93	130.63	126.15	123.31	123.29	136.29	123.28	122.96
4	124.51	123.06	125.82	127.66	125.89	128.71	126.35	123.51	123.31	132.40	123.15	123.00
5	123.88	125.99	125.85	126.19	125.88	135.57	134.43	123.77	123.17	131.16	123.49	123.12
6	123.64	124.31	123.27	126.59	127.06	134.07	131.06	126.59	123.49	129.35	123.18	123.34
7	123.64	123.45	124.07	126.02	129.06	132.09	129.65	126.45	123.59	127.70	123.37	123.16
8	123.22	123.91	123.33	126.01	128.27	128.99	129.22	125.23	123.41	127.23	123.26	123.11
9	122.99	123.58	123.55	125.91	127.86	128.84	127.40	123.76	123.65	126.88	123.39	123.48
10	123.88	123.33	123.16	127.74	126.27	127.03	128.10	123.79	123.78	126.41	123.19	123.15
11	123.16	123.18	124.31	128.10	126.50	128.15	127.13	123.43	123.64	127.94	123.50	123.71
12	123.27	123.57	124.73	132.31	126.01	127.41	126.86	123.41	124.25	127.70	123.33	123.30
13	124.05	123.37	124.66	137.09	125.96	127.67	126.34	123.14	124.01	126.54	122.96	123.69
14	124.42	123.32	124.82	135.83	125.91	126.69	125.87	123.33	123.85	127.57	123.64	123.15
15	123.21	123.17	124.08	134.61	125.52	127.57	125.74	123.38	128.10	127.14	123.34	123.05
16	122.97	123.32	124.52	129.13	125.84	126.40	125.66	123.37	131.50	126.29	123.47	123.19
17	122.92	123.68	123.21	129.02	125.84	125.99	123.52	123.25	129.43	126.04	123.21	123.05
18	123.24	123.68	123.31	127.47	124.29	125.95	125.74	123.39	126.65	127.46	123.29	123.07
19	122.94	123.41	123.75	126.25	125.12	125.84	123.59	123.73	127.82	126.64	123.11	123.37
20	122.75	125.75	123.37	126.36	124.33	126.03	123.44	123.49	131.02	126.41	123.19	123.19
21	123.17	127.23	123.40	126.15	126.97	126.08	123.40	123.33	129.36	126.39	123.04	123.18
22	122.87	125.99	123.31	126.07	130.04	127.19	123.39	123.37	130.27	125.82	123.46	123.27
23	122.84	125.93	124.49	126.04	127.72	126.86	123.73	123.43	129.90	125.32	123.03	123.63
24	123.11	124.50	125.49	125.88	126.51	127.90	123.33	123.09	128.56	123.46	123.07	123.34
25	122.95	123.67	124.00	125.81	126.09	126.64	123.33	123.82	127.30	123.78	122.98	123.35
26	123.11	123.39	124.94	124.98	126.10	126.29	123.22	123.55	127.57	123.44	123.11	125.29
27	122.99	129.66	124.84	124.25	126.23	126.03	123.41	123.29	126.35	123.75	123.16	123.36
28	123.31	128.20	125.38	124.61	136.18	125.90	123.13	122.81	125.83	123.48	122.99	123.31
29	122.99	127.30	124.96	125.22	---	126.10	123.18	123.36	125.68	123.52	123.17	129.20
30	123.42	125.90	124.94	125.98	---	131.31	122.75	123.09	123.61	123.42	123.36	125.95
31	122.99	---	125.91	125.99	---	128.38	---	123.19	---	123.44	123.25	---
MEAN	123.48	124.50	124.50	127.70	126.77	128.40	125.75	123.68	125.97	126.57	123.25	123.61
MAX	126.20	129.66	126.12	137.09	136.18	135.68	134.43	126.59	131.50	136.29	123.64	129.20
MIN	122.75	122.80	123.16	124.25	124.29	125.84	122.75	122.81	123.17	123.37	122.96	122.96

CAL YR 1988 MEAN 123.84 MAX 131.25 MIN 122.62
WTR YR 1989 MEAN 125.34 MAX 137.09 MIN 122.75

02464000 NORTH RIVER NEAR SAMANTHA, AL

LOCATION.--Lat 33°28'45", long 87°35'50", in SW¼ sec. 16, T. 18 S., R. 10 W., Tuscaloosa County, Hydrologic Unit 03160112, on left bank about 200 ft downstream from bridge on county road, 1.2 mi upstream from Cripple Creek, 4 mi north of Samantha, and at mile 36.9.

DRAINAGE AREA.--223 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1938 to September 1954, October 1968 to current year.

REVISED RECORDS.--WSP 1304: 1939(M): WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 232.39 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 25, 1939, nonrecording gage 40 ft downstream at same datum.

REMARKS.--Water-discharge records good except those below 10 ft³/s, which are poor.

AVERAGE DISCHARGE.--36 years (water years 1940-54, 1969-89), 380 ft³/s, 23.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,500 ft³/s, Mar. 20, 1970, gage height, 35.08 ft; minimum, 0.1 ft³/s, Sept. 5-8, 13-15, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of July 1916 and February 1936 reached a stage of about 31 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 13	1300	*7,140	*15.47	June 15	0800	6,310	14.06
Feb. 28	1200	6,110	13.66	July 2	1300	6,410	14.27
Mar. 6	0400	5,820	13.08				

Minimum daily discharge, 12 ft³/s, Oct. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	53	331	2470	343	3130	718	175	44	239	97	26
2	425	46	243	1160	285	1240	540	176	40	4380	93	26
3	330	39	193	856	249	881	444	117	38	2190	105	23
4	218	107	164	1030	237	761	1530	123	84	1350	80	20
5	117	739	138	682	675	1900	3900	814	392	1280	66	19
6	80	362	120	532	2260	5040	1540	1800	636	784	63	18
7	54	188	107	419	1900	1810	987	622	334	433	78	16
8	42	131	98	550	1060	1040	741	350	389	319	83	15
9	33	113	88	892	722	766	684	254	1320	655	61	14
10	28	95	81	2090	559	607	523	324	599	770	49	14
11	25	84	78	2450	470	510	426	243	1530	1280	44	15
12	21	74	73	4260	395	438	365	177	1800	642	41	18
13	18	235	66	6560	341	386	319	148	826	2020	38	38
14	15	272	63	4270	303	349	277	162	1100	1930	35	67
15	13	185	59	2740	267	311	258	287	5440	913	34	39
16	13	150	56	1540	238	271	235	203	2630	593	33	26
17	13	125	52	996	227	243	204	155	1200	519	152	23
18	12	102	49	749	243	232	182	131	696	354	99	21
19	13	130	47	587	325	215	168	140	702	340	58	19
20	15	1550	48	471	346	206	171	135	564	301	43	18
21	20	870	50	373	2100	743	162	147	846	241	37	16
22	36	453	52	320	1970	1030	140	118	667	227	34	31
23	32	302	141	281	962	910	128	135	782	394	31	106
24	26	221	316	246	676	1120	119	123	551	288	28	90
25	22	170	357	216	544	825	107	103	442	224	26	65
26	27	205	268	192	470	633	102	89	295	175	28	112
27	22	2100	211	185	545	512	101	77	216	149	52	76
28	22	1180	225	170	4760	432	90	68	173	141	34	60
29	124	681	267	153	---	488	85	60	171	116	28	152
30	93	466	287	310	---	1870	82	56	182	155	25	803
31	62	---	1520	471	---	1120	---	51	---	121	23	---
TOTAL	2189	11428	5848	38221	23472	30019	15328	7563	24689	23523	1698	1986
MEAN	70.6	381	189	1233	838	968	511	244	823	759	54.8	66.2
MAX	425	2100	1520	6560	4760	5040	3900	1800	5440	4380	152	803
MIN	12	39	47	153	227	206	82	51	38	116	23	14
CFSM	.32	1.71	.85	5.53	3.76	4.34	2.29	1.09	3.69	3.40	.25	.30
IN.	.37	1.91	.98	6.38	3.92	5.01	2.56	1.26	4.12	3.92	.28	.33

CAL YR 1988 TOTAL 57592.73 MEAN 157 MAX 2100 MIN .68 CFSM .71 IN. 9.61
WTR YR 1989 TOTAL 185964 MEAN 509 MAX 6560 MIN 12 CFSM 2.28 IN. 31.02

02464000 NORTH RIVER NEAR SAMANTHA, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1972 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to September 1981, October 1982 to current year.
pH: October 1982 to October 1986.
WATER TEMPERATURES: October 1980 to September 1981, October 1982 to current year.
DISSOLVED OXYGEN: October 1982 to October 1986.

INSTRUMENTATION.--Water-quality monitor October 1980 to September 1981 and October 1982 to current year.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument and vandalism.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1050 microsiemens, Aug. 10, 1986; minimum, 10 microsiemens, Mar. 13, 1986.
pH: Maximum, 7.8 units, Apr. 3, 1985; minimum, 4.7 units Dec. 1, 1982.
WATER TEMPERATURES: Maximum, 35.0°C, Aug. 1, 1986; minimum, 0°C, Jan. 12-19, 1981, Dec. 25-27, 1983, Jan. 24, 27, 1985.
DISSOLVED OXYGEN: Maximum, 14.6 mg/L, Jan. 23, 1985; minimum, 4.4 mg/L, Oct. 16, 21, 1984, Aug. 26, 1986.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 486 microsiemens, Oct. 30; minimum, 24 microsiemens, July 19.
WATER TEMPERATURES: Maximum, 30.6°C, Aug. 26; minimum, 4.1°C, Feb. 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT											
03...	1000	328	128	131	6.50	--	20.0	752	8.0	89	240
31...	1100	65	195	--	6.50	--	14.5	756	8.9	88	--
NOV											
29...	0900	694	70	--	6.40	--	10.0	752	10.6	95	--
JAN											
03...	1130	757	67	67	6.70	18.0	11.0	751	10.8	99	140
31...	0850	463	96	--	6.80	--	10.0	755	10.4	93	--
MAR											
02...	1100	1230	52	--	6.90	--	9.5	761	11.1	97	--
31...	1115	1210	59	60	6.60	--	14.5	754	8.8	87	180
APR											
28...	1115	91	115	--	6.70	--	22.0	751	7.8	91	--
MAY											
30...	0930	55	215	--	6.80	--	23.0	758	7.0	82	--
JUL											
06...	1415	623	62	63	6.30	33.0	22.0	754	8.2	95	220
31...	1130	119	110	--	6.60	--	27.0	754	7.4	94	--
SEP											
05...	0915	19	235	--	6.90	--	24.5	756	7.1	86	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT											
03...	270	43	43	8.0	5.6	5.0	19	0.3	1.7	6.90	37
JAN											
03...	130	19	19	3.4	2.5	3.3	26	.3	1.0	6.70	15
MAR											
31...	210	19	19	3.5	2.5	2.6	22	.3	.90	6.50	14
JUL											
06...	280	19	19	3.5	2.4	3.1	25	.3	1.0	6.53	13

02464000 NORTH RIVER NEAR SAMANTHA, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
03...	3.7	0.20	8.8	107	70	0.15	94.8	0.140	0.010	0.150
JAN										
03...	3.0	.10	9.0	44	38	.06	89.9	--	<.010	.150
MAR										
31...	1.6	<.10	8.8	41	34	.06	134	.070	.010	.080
JUL										
06...	2.4	.10	7.1	39	33	.05	65.6	--	<.010	.100

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT										
03...	0.61	0.76	0.060	0.030	0.03	30	1100	160	130	60
JAN										
03...	.33	0.48	.030	.010	.02	<20	860	230	100	70
MAR										
31...	<.20	--	.020	.020	.0	<20	1200	240	90	40
JUL										
06...	<.20	--	<.020	.010	--	<20	1200	50	120	70

02464000 NORTH RIVER NEAR SAMANTHA, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	170	133	159	250	198	224	134	89	110	---	---	---
2	164	112	128	279	243	268	141	98	122	---	---	---
3	138	114	127	284	274	279	146	93	119	---	---	---
4	118	111	115	270	232	252	187	104	145	---	---	---
5	125	108	114	194	121	152	154	139	146	---	---	---
6	137	120	131	109	88	93	170	105	141	88	84	85
7	143	131	136	131	94	107	115	105	108	96	88	94
8	153	137	145	133	119	126	107	80	95	95	91	93
9	167	150	157	124	114	119	93	73	82	104	88	95
10	169	156	165	121	111	117	---	---	---	104	73	85
11	155	123	133	117	101	103	---	---	---	81	69	75
12	124	118	121	109	98	103	---	---	---	85	66	78
13	123	118	120	120	97	103	---	---	---	88	67	75
14	126	120	122	107	84	96	---	---	---	83	68	76
15	129	122	125	104	69	79	---	---	---	89	71	78
16	138	126	132	89	63	76	---	---	---	72	65	68
17	158	138	146	84	63	70	---	---	---	74	69	71
18	170	155	162	80	60	67	---	---	---	80	74	77
19	167	158	164	79	74	76	---	---	---	86	80	83
20	160	147	154	75	67	73	---	---	---	91	86	89
21	151	136	145	96	43	70	---	---	---	97	91	94
22	188	139	167	73	58	65	---	---	---	104	97	101
23	203	186	194	86	69	77	---	---	---	110	104	106
24	384	200	269	97	81	91	---	---	---	115	110	112
25	379	282	333	94	91	92	---	---	---	121	115	118
26	372	359	363	88	85	87	---	---	---	130	121	124
27	400	362	380	88	81	84	---	---	---	144	130	136
28	394	319	373	86	75	83	---	---	---	148	144	146
29	416	318	369	84	67	73	---	---	---	160	147	153
30	486	192	315	90	71	85	---	---	---	165	140	156
31	202	193	199	---	---	---	---	---	---	142	99	115
MONTH	486	108	189	284	43	113	---	---	---	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	102	98	100	58	52	56	68	57	61	---	---	---
2	107	101	105	67	59	62	59	58	58	---	---	---
3	112	106	110	69	67	68	85	58	74	---	---	---
4	116	111	114	75	70	73	85	43	65	---	---	---
5	110	62	98	92	34	64	49	44	47	---	---	---
6	76	56	61	47	34	39	53	48	50	---	---	---
7	57	54	56	62	44	56	56	53	54	---	---	---
8	64	57	60	69	63	65	56	54	55	---	---	---
9	67	63	65	79	70	74	59	55	57	---	---	---
10	70	66	68	80	76	78	61	58	60	---	---	---
11	74	70	72	83	78	80	64	61	63	---	---	---
12	81	73	76	87	82	85	70	64	66	---	---	---
13	83	80	82	91	88	89	72	67	70	---	---	---
14	87	83	85	98	87	90	78	72	75	---	---	---
15	96	86	89	99	95	97	81	77	79	---	---	---
16	104	96	101	109	99	105	86	79	83	---	---	---
17	106	102	104	111	105	108	89	85	87	---	---	---
18	105	103	104	113	108	110	93	88	91	---	---	---
19	117	97	106	115	112	114	93	91	92	---	---	---
20	102	96	98	113	94	103	96	93	95	---	---	---
21	104	60	77	96	83	89	99	95	97	---	---	---
22	61	57	60	122	72	85	102	98	100	---	---	---
23	66	62	64	89	71	74	102	98	100	---	---	---
24	70	66	68	76	64	70	99	95	97	---	---	---
25	71	68	70	73	70	71	101	95	98	---	---	---
26	74	68	72	77	72	74	108	100	104	---	---	---
27	76	71	75	79	75	76	113	108	111	---	---	---
28	71	52	58	81	78	80	115	100	114	---	---	---
29	---	---	---	84	72	81	---	---	---	---	---	---
30	---	---	---	81	55	64	---	---	---	213	207	209
31	---	---	---	102	57	75	---	---	---	227	214	221
MONTH	117	52	82	122	34	79	---	---	---	---	---	---

02464000 NORTH RIVER NEAR SAMANTHA, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	238	227	232	139	125	136	110	106	107	162	156	159
2	249	236	243	119	54	77	126	111	118	178	164	169
3	251	228	245	55	52	53	143	126	134	200	178	188
4	253	154	229	53	50	52	141	129	134	224	201	213
5	192	91	155	57	52	54	153	140	145	238	225	231
6	111	67	90	63	53	57	167	154	160	253	240	245
7	74	62	68	66	54	60	185	162	173	263	254	258
8	83	57	78	79	67	74	229	186	203	270	263	265
9	79	51	58	88	78	84	258	231	249	276	271	273
10	64	59	61	74	47	55	250	173	209	278	276	277
11	62	53	58	48	30	38	184	171	176	275	264	269
12	56	50	53	42	30	36	186	170	180	264	251	256
13	57	53	55	50	30	45	174	167	170	265	252	259
14	58	52	56	---	---	---	174	164	169	304	211	281
15	52	37	42	---	---	---	171	165	167	267	247	261
16	39	32	35	---	---	---	175	171	173	250	197	221
17	38	34	35	---	---	---	338	175	219	195	158	175
18	45	37	40	---	---	---	336	109	172	157	131	144
19	55	44	46	38	24	31	127	101	109	131	125	128
20	59	50	53	51	39	45	138	129	135	156	132	144
21	60	48	55	46	33	38	166	138	152	178	157	166
22	60	53	57	44	37	39	178	166	173	208	175	195
23	63	58	60	62	45	54	174	140	155	184	123	164
24	72	63	67	73	60	62	205	140	167	260	140	222
25	74	70	72	86	72	77	221	207	217	246	100	178
26	84	71	76	83	73	77	215	193	203	155	104	124
27	100	85	93	76	64	73	238	202	223	255	158	202
28	113	100	105	65	59	62	272	239	257	331	244	305
29	130	113	123	83	62	71	274	267	270	235	109	154
30	140	131	136	109	83	93	273	229	261	165	74	126
31	---	---	---	111	106	108	226	162	189	---	---	---
MONTH	253	32	93	---	---	---	338	101	180	331	74	208

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.3	21.0	21.2	15.1	13.7	14.2	---	---	---	---	---	---
2	21.0	20.5	20.8	14.2	12.6	13.5	---	---	---	---	---	---
3	21.2	20.3	20.7	15.0	13.3	14.3	---	---	---	---	---	---
4	20.2	18.3	19.2	15.8	14.2	14.8	---	---	---	---	---	---
5	18.2	16.7	17.5	15.4	14.6	15.1	---	---	---	---	---	---
6	16.6	15.2	15.9	15.2	13.6	14.3	---	---	---	10.6	9.1	10.0
7	16.2	14.3	15.2	13.8	11.5	12.5	---	---	---	13.3	11.5	12.2
8	15.6	13.5	14.7	12.8	12.1	12.4	---	---	---	13.7	13.3	13.6
9	14.7	13.6	14.2	14.0	13.0	13.5	---	---	---	13.6	11.5	12.5
10	[illegible]	14.0	14.7	15.0	14.1	14.8	---	---	---	11.3	9.7	10.3
11	16.0	13.6	14.7	16.0	13.7	15.8	---	---	---	11.5	9.9	11.0
12	15.4	13.1	14.3	14.8	12.4	13.8	---	---	---	11.8	10.8	11.3
13	14.3	11.8	13.1	13.6	12.2	13.2	---	---	---	13.2	12.4	12.7
14	13.6	10.9	12.4	14.5	13.2	13.8	---	---	---	13.8	13.3	13.4
15	13.2	10.9	12.2	14.2	13.4	13.8	---	---	---	12.7	11.7	12.0
16	13.8	11.5	12.6	15.2	14.0	14.5	---	---	---	12.3	11.8	12.1
17	15.4	13.0	14.3	16.0	15.1	15.5	---	---	---	11.8	10.7	11.2
18	16.4	14.3	15.4	15.8	14.2	14.9	---	---	---	10.9	9.1	10.0
19	17.3	15.6	16.3	14.3	11.6	12.6	---	---	---	9.3	8.2	8.8
20	15.4	14.1	14.5	13.4	12.4	13.0	---	---	---	9.5	8.7	9.0
21	15.2	14.2	14.5	15.4	13.4	14.4	---	---	---	10.4	9.4	9.8
22	15.1	13.4	14.1	15.5	14.0	14.9	---	---	---	10.2	8.4	9.1
23	14.1	12.6	13.4	14.1	11.6	13.1	---	---	---	8.2	6.9	7.4
24	15.3	13.1	14.1	12.1	11.0	11.6	---	---	---	7.7	6.4	7.1
25	14.4	12.0	13.3	11.5	10.2	11.3	---	---	---	8.8	7.3	8.1
26	13.6	12.4	13.0	11.2	10.0	10.3	---	---	---	10.0	8.2	8.9
27	15.0	12.8	13.8	12.0	10.5	11.4	---	---	---	11.2	9.8	10.3
28	15.1	14.0	14.5	14.8	12.0	13.4	---	---	---	9.7	8.4	9.1
29	15.1	14.1	14.6	13.7	10.2	12.1	---	---	---	9.6	8.4	9.0
30	15.3	14.4	14.8	---	---	---	---	---	---	11.5	9.7	10.7
31	14.5	13.9	14.1	---	---	---	---	---	---	11.2	10.1	10.7
MONTH	21.3	10.9	15.1	---	---	---	---	---	---	---	---	---

02464000 NORTH RIVER NEAR SAMANTHA, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.3	10.3	11.2	10.2	9.5	9.9	14.9	13.2	14.1	---	---	---
2	14.2	12.4	13.2	10.3	9.4	9.7	14.7	12.9	13.9	---	---	---
3	14.6	13.3	14.3	11.1	10.2	10.6	16.2	14.2	15.3	---	---	---
4	13.2	10.4	11.8	12.1	11.0	11.5	16.6	15.3	16.2	---	---	---
5	10.3	7.9	9.1	14.5	12.2	13.5	15.3	13.3	14.8	---	---	---
6	8.5	8.3	8.5	14.0	9.7	11.8	14.4	10.4	13.2	---	---	---
7	8.2	7.5	7.9	9.6	8.0	8.7	14.1	10.3	13.1	---	---	---
8	7.4	6.6	7.0	8.7	7.2	8.1	13.5	12.1	13.1	---	---	---
9	6.8	5.5	6.1	9.5	7.7	8.7	13.4	12.3	12.8	---	---	---
10	5.3	4.2	4.8	10.7	8.7	9.8	12.2	11.2	11.8	---	---	---
11	5.7	4.1	4.9	12.1	10.0	11.1	11.8	9.7	10.7	---	---	---
12	7.9	5.5	6.5	13.3	11.4	12.4	12.7	9.6	11.3	---	---	---
13	10.9	7.9	9.1	14.2	12.5	13.5	13.8	8.6	12.3	---	---	---
14	14.1	11.0	12.6	16.6	13.9	15.2	13.7	12.6	13.3	---	---	---
15	16.5	14.3	15.4	18.1	16.4	17.1	14.4	13.1	13.7	---	---	---
16	16.1	14.7	15.7	17.4	15.8	16.6	16.2	11.6	14.4	---	---	---
17	14.6	12.1	13.4	16.7	14.5	15.7	17.6	12.0	15.7	---	---	---
18	12.0	9.7	10.8	17.8	15.6	16.7	19.0	15.9	17.4	---	---	---
19	9.6	9.0	9.2	17.0	15.2	16.2	18.6	17.8	18.2	---	---	---
20	10.5	9.0	9.5	17.4	15.1	16.3	19.4	16.8	18.0	---	---	---
21	12.3	10.7	11.8	17.3	13.3	15.6	19.8	17.1	18.4	---	---	---
22	11.9	9.3	10.8	13.3	11.4	12.0	20.7	16.5	18.9	---	---	---
23	9.1	6.3	7.6	11.4	10.3	10.8	21.9	19.1	20.3	---	---	---
24	6.2	4.7	5.5	10.7	10.1	10.4	23.1	20.0	21.3	---	---	---
25	6.1	4.4	5.2	11.5	10.6	11.0	24.0	20.6	22.1	---	---	---
26	8.2	6.1	7.0	12.8	11.3	12.0	24.1	21.1	22.5	---	---	---
27	9.3	8.3	9.0	15.3	12.0	13.8	25.0	21.4	23.1	---	---	---
28	10.1	8.8	9.3	17.1	14.8	16.0	24.9	22.1	---	---	---	---
29	---	---	---	17.6	16.3	17.0	---	---	---	---	---	---
30	---	---	---	16.2	14.7	15.4	---	---	---	26.5	23.5	24.7
31	---	---	---	15.2	13.9	14.5	---	---	---	27.8	24.9	26.1
MONTH	16.5	4.1	9.5	18.1	7.2	13.0	---	---	---	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.2	25.3	26.6	25.1	24.3	24.9	27.7	26.3	27.1	29.9	26.4	28.2
2	26.9	25.3	26.0	23.7	20.7	21.3	27.2	25.9	26.6	29.2	26.9	28.1
3	26.6	24.6	25.4	21.3	20.6	20.9	28.3	25.8	27.0	29.1	26.1	27.7
4	25.0	23.3	24.5	21.9	20.9	21.3	29.0	26.1	27.5	27.7	25.8	26.8
5	23.7	22.0	22.8	22.1	21.2	21.7	29.3	26.5	28.0	27.4	24.4	26.1
6	21.9	21.4	21.6	22.9	21.6	22.2	29.5	26.9	28.1	26.3	24.2	25.5
7	22.3	20.5	21.4	23.6	22.5	23.0	27.6	26.4	27.1	25.7	23.8	24.9
8	22.0	20.4	21.6	24.0	22.9	23.5	26.7	24.5	25.6	26.4	23.8	25.1
9	20.6	19.8	20.2	24.8	22.8	23.8	24.8	22.6	23.9	26.3	24.2	25.3
10	21.5	19.9	20.7	22.9	21.8	22.5	24.9	22.9	23.9	26.7	25.0	25.9
11	21.4	20.1	20.8	23.0	21.8	22.5	25.6	22.9	24.1	26.3	25.2	25.8
12	21.0	19.6	20.2	23.7	22.4	23.1	25.9	23.0	24.3	26.4	24.6	25.6
13	21.8	20.7	21.2	23.6	21.9	22.7	25.9	22.9	24.3	27.4	24.6	25.9
14	21.6	20.6	21.4	22.5	21.9	22.3	24.8	23.2	24.0	26.9	24.2	25.8
15	20.4	19.4	19.8	23.1	21.7	22.4	25.9	23.1	24.4	25.1	23.5	24.5
16	19.3	18.8	19.1	23.1	22.8	23.0	25.7	23.8	24.7	23.3	22.0	22.7
17	19.9	18.3	19.1	23.5	22.4	23.0	25.2	23.7	24.5	23.2	20.8	22.1
18	20.8	19.3	20.0	24.1	22.8	23.4	25.0	22.9	23.9	23.2	20.2	21.9
19	21.4	20.5	20.9	24.5	23.3	23.8	25.5	23.0	24.3	22.9	20.1	21.7
20	22.0	20.9	21.5	24.9	23.5	24.1	26.6	24.3	25.3	23.2	20.6	22.0
21	21.9	21.0	21.4	24.7	23.5	24.1	27.6	25.1	26.1	22.9	20.5	21.9
22	21.8	21.0	21.4	24.4	23.6	23.9	28.5	25.4	26.8	23.5	20.9	22.4
23	21.4	20.2	20.7	23.8	22.9	23.4	29.2	26.0	27.5	21.5	19.8	21.2
24	22.0	21.0	21.6	24.9	23.4	24.0	29.8	26.5	28.1	19.6	18.2	18.8
25	23.0	21.4	22.2	25.9	23.8	24.8	30.5	26.9	28.6	18.3	17.0	17.6
26	24.3	22.4	23.3	26.8	24.9	25.8	30.6	27.1	28.8	18.8	17.1	17.9
27	25.2	23.6	24.4	27.5	25.9	26.5	30.0	27.8	28.7	19.2	17.8	18.5
28	25.6	24.3	24.8	27.9	25.8	26.8	29.9	27.6	28.6	19.0	17.7	18.4
29	25.4	24.3	24.7	28.7	26.3	27.4	29.4	26.7	28.1	17.7	17.5	17.6
30	26.0	24.3	25.0	28.7	24.7	27.4	28.3	26.9	27.7	19.2	17.5	18.2
31	---	---	---	28.3	26.5	27.5	29.1	26.1	27.6	---	---	---
MONTH	28.2	18.3	22.1	28.7	20.6	23.8	30.6	22.6	26.3	29.9	17.0	23.1

02464146 TURKEY CREEK NEAR TUSCALOOSA, AL

LOCATION.--Lat 33°24'48", long 87°30'38", in E½ sec. 7, T. 19 S., R. 9 W., Tuscaloosa County, Hydrologic Unit 03160112, on left bank, 1,400 ft downstream from State Highway 69, 1.1 mi upstream from Long Creek, 4.7 mi upstream from mouth, 5.5 mi east of Samantha, and 14 mi north of Tuscaloosa.

DRAINAGE AREA.--6.16 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1981 to September 1984, October 1986 to current year.

REVISED RECORDS.--WDR AL-82-1: 1981 (M).

GAGE.--Water-stage recorder. Altitude of gage is 270 ft, from topographic map.

REMARKS.--Estimated daily discharges: Aug. 16 to Sept. 6. Water-discharge records good except those for period of estimated record, which are poor.

AVERAGE DISCHARGE.--6 years (water years 1982-84, 1987-89), 9.99 ft^3/s, 22.02 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum, discharge, 3,500 ft^3/s, Dec. 3, 1983, gage height, 11.98 ft; minimum, 0.49 ft^3/s, June 28, 29, 30, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 21	0815	*640	*5.86	July 2	0200	225	4.36
June 22	0145	266	4.41	July 2	1200	372	4.88

Minimum daily discharge, 0.96 ft^3/s, Nov. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	1.9	5.3	24	6.7	29	21	4.9	2.0	3.4	2.7	2.1
2	6.8	1.4	4.3	13	5.8	20	16	3.2	2.7	139	3.0	1.9
3	3.6	1.3	3.7	12	5.7	15	14	3.1	2.6	56	2.7	1.7
4	2.5	2.5	3.3	9.7	4.8	41	30	6.3	11	37	2.5	1.6
5	2.1	3.5	3.0	7.9	13	46	27	8.5	8.4	23	2.5	1.6
6	1.8	1.3	2.8	7.6	20	30	14	4.9	13	15	2.5	1.9
7	1.5	1.1	2.8	6.2	31	21	11	3.4	4.6	11	3.1	1.6
8	1.4	1.1	2.6	7.1	18	15	12	2.9	24	8.9	2.4	1.7
9	1.4	1.2	2.6	17	13	12	13	7.2	18	7.7	2.1	1.6
10	1.3	1.3	2.4	36	10	10	10	15	8.1	6.3	2.2	1.7
11	1.3	1.2	2.6	57	8.9	8.9	7.9	5.3	29	5.1	2.1	2.4
12	1.2	1.4	2.3	54	7.7	7.7	6.9	4.1	19	6.6	2.1	2.0
13	1.0	2.9	2.2	62	6.7	7.0	5.8	3.9	11	6.6	2.0	6.2
14	1.0	1.2	2.2	42	6.0	6.2	5.4	11	17	5.4	2.0	4.4
15	1.1	1.4	2.2	36	5.3	5.8	5.4	8.1	43	4.6	2.2	3.0
16	1.1	1.2	2.2	25	5.0	5.6	4.7	5.2	25	4.5	2.4	2.1
17	1.1	1.2	2.0	17	4.5	4.9	4.0	4.1	14	3.8	6.0	2.0
18	1.1	.96	1.9	13	5.8	4.4	3.9	3.8	9.6	3.4	4.0	1.8
19	1.3	1.2	2.0	11	5.4	4.1	3.8	5.0	14	3.6	2.9	1.8
20	1.3	13	2.0	9.1	5.7	19	3.9	3.8	9.7	3.4	2.6	1.8
21	2.4	2.9	2.0	7.6	40	61	3.5	3.5	138	2.8	2.3	2.0
22	1.3	1.9	2.1	6.7	17	34	3.4	3.4	105	3.2	2.1	2.6
23	1.3	1.5	15	6.1	11	30	3.2	3.2	44	3.4	2.0	2.9
24	2.1	1.3	6.9	5.7	8.4	24	3.2	2.9	24	3.7	1.9	2.4
25	1.2	1.2	4.6	5.1	7.3	18	3.1	2.6	14	3.2	1.9	10
26	1.1	25	3.7	4.9	6.8	14	3.1	2.5	9.1	4.9	2.5	4.8
27	1.1	34	3.3	4.5	11	11	3.0	2.3	6.7	4.0	2.2	2.4
28	2.3	15	5.1	4.0	80	9.5	3.0	2.1	5.3	2.9	2.0	9.8
29	1.8	8.5	3.8	3.7	---	40	3.2	2.0	4.8	2.7	1.9	12
30	1.2	6.5	5.4	15	---	83	3.1	1.9	3.7	2.7	1.9	27
31	2.0	---	39	7.8	---	33	---	1.9	---	2.6	2.3	---
TOTAL	61.7	140.06	145.3	537.7	370.5	670.1	251.5	142.0	640.3	390.4	77.0	120.8
MEAN	1.99	4.67	4.69	17.3	13.2	21.6	8.38	4.58	21.3	12.6	2.48	4.03
MAX	10	34	39	62	80	83	30	15	138	139	6.0	27
MIN	1.0	.96	1.9	3.7	4.5	4.1	3.0	1.9	2.0	2.6	1.9	1.6

CAL YR 1988 TOTAL 1437.73 MEAN 3.93 MAX 48 MIN .55
WTR YR 1989 TOTAL 3547.36 MEAN 9.72 MAX 139 MIN .96

02464146 TURKEY CREEK NEAR TUSCALOOSA, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1981 to September 1984, October 1986 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1981 to September 1984, October 1986 to current year.
WATER TEMPERATURE: February 1981 to September 1984, October 1986 to current year.
SUSPENDED SEDIMENT: February 1981 to September 1984.

INSTRUMENTATION.--U.S. Geological Survey water-quality mini-monitor February 1981 to September 1984 and October 1986 to current year.

REMARKS.--Interruptions in specific conductance data and water temperature data were due to malfunctions in equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 408 microsiemens, Aug. 18, 1989; minimum, 8 microsiemens, Aug. 5, 7, 1981.
WATER TEMPERATURE: Maximum, 32.6°C July 24, 1989; minimum, 0°C Dec. 19, 20, 1981, Jan. 17, 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 408 microsiemens, Aug. 18; minimum, 60 microsiemens, Nov. 26, 27, Mar. 30, June 21.
WATER TEMPERATURE: Maximum, 32.6°C July 24; minimum, 0.7°C Dec. 18, 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT											
04...	1200	2.8	220	230	7.20	--	17.0	757	8.7	91	270
NOV											
01...	1250	2.1	220	--	6.90	--	15.5	752	9.0	91	--
DEC											
01...	0930	5.8	270	--	6.80	--	7.0	760	11.0	91	--
JAN											
05...	1010	7.7	195	199	6.70	7.0	7.0	757	11.8	98	48
FEB											
01...	1315	6.8	185	--	7.20	--	12.0	750	10.6	100	--
MAR											
03...	1130	15	138	--	6.90	--	11.5	760	10.7	98	--
APR											
04...	1215	66	140	139	6.80	--	16.0	751	9.7	100	480
MAY											
01...	1030	5.5	240	--	7.80	--	18.5	750	8.4	91	--
31...	1145	2.5	240	--	7.40	--	24.5	759	8.5	102	--
JUL											
03...	1415	51	E98	99	6.70	26.0	21.0	751	8.4	96	190
AUG											
02...	1300	3.4	295	--	7.70	--	25.5	756	8.3	102	--
SEP											
06...	1230	2.0	255	--	7.20	--	23.5	756	8.5	101	--

02464146 TURKEY CREEK NEAR TUSCALOOSA, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NCNCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3
OCT											
04...	140	95	69	20	11	2.6	5	0.1	2.0	7.50	26
JAN											
05...	52	82	82	17	9.6	2.1	5	.1	1.4	7.20	--
APR											
04...	220	56	56	11	6.9	1.8	6	.1	1.2	7.03	--
JUL											
03...	470	38	38	7.7	4.6	1.3	7	.1	1.1	6.57	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT											
04...	73	2.2	0.20	8.3	164	135	0.22	1.26	0.350	0.010	0.360
JAN											
05...	70	1.7	.10	9.3	125	112	.17	2.60	--	<.010	.290
APR											
04...	40	1.0	<.10	6.5	83	69	.11	14.8	.300	.010	.310
JUL											
03...	28	1.1	.20	6.0	62	50	.08	8.54	.220	.010	.230

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT										
04...	0.22	0.58	0.020	0.010	0.01	<20	470	100	250	210
JAN										
05...	.24	.53	<.020	.010	--	<20	270	60	300	300
APR										
04...	<.20	--	<.020	.020	--	<20	540	80	270	240
JUL										
03...	.25	.48	<.020	.020	--	<20	920	80	310	270

02464146 TURKEY CREEK NEAR TUSCALOOSA, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	245	165	224	230	182	212	270	235	259	141	98	118
2	202	165	187	193	176	183	231	193	210	179	142	161
3	213	203	210	209	194	204	192	168	178	186	174	181
4	237	212	221	214	175	207	169	160	164	199	173	183
5	248	234	239	267	183	224	162	158	160	210	188	200
6	251	238	245	206	182	193	159	155	157	218	196	207
7	256	239	247	215	207	212	158	151	156	216	199	210
8	258	242	249	220	208	215	158	152	156	226	187	209
9	264	245	253	210	204	208	160	153	156	226	126	181
10	261	244	251	205	201	203	160	155	158	146	106	122
11	262	244	250	203	196	200	162	153	157	181	87	123
12	266	245	253	201	177	196	163	152	157	179	83	129
13	262	247	253	225	174	204	168	157	162	142	87	113
14	268	252	260	175	162	167	173	166	169	189	145	162
15	271	256	261	194	177	187	173	170	171	172	150	162
16	271	254	261	194	180	191	174	171	172	186	173	180
17	269	256	261	189	169	178	177	173	174	194	187	190
18	267	251	258	173	167	168	180	176	178	199	188	195
19	272	252	262	184	174	180	183	177	179	206	196	200
20	267	200	240	177	117	150	186	179	182	207	197	203
21	241	179	207	178	161	169	188	182	185	210	207	208
22	177	165	170	193	179	184	187	184	185	208	206	207
23	205	179	196	210	193	200	185	88	127	211	207	209
24	272	206	251	215	210	213	132	111	121	214	211	212
25	235	192	203	217	213	215	148	133	139	217	214	215
26	227	200	218	215	60	190	163	149	154	220	217	219
27	237	224	232	121	60	98	174	163	168	221	214	217
28	237	189	222	149	118	131	193	162	178	226	218	222
29	233	180	212	184	150	167	173	152	162	231	226	228
30	196	178	186	262	185	223	189	174	180	232	125	171
31	211	197	206	---	---	---	220	90	129	183	156	171
MONTH	272	165	232	267	60	189	270	88	167	232	83	184

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	191	177	184	135	107	123	128	115	122	268	160	216
2	202	184	195	142	135	139	142	128	133	273	140	211
3	205	198	202	142	139	140	148	143	145	271	218	246
4	203	189	196	138	77	120	189	87	138	236	221	230
5	242	126	187	119	78	94	147	85	101	229	212	218
6	176	123	137	131	109	121	128	111	119	233	213	222
7	143	115	124	135	131	133	135	120	127	235	224	231
8	151	127	140	140	133	136	156	117	134	244	228	235
9	170	153	162	144	138	141	125	114	121	243	222	238
10	179	170	175	151	143	145	132	125	127	243	127	177
11	184	178	181	156	141	148	136	130	132	196	174	189
12	186	184	185	168	156	160	140	134	136	215	182	202
13	193	187	189	176	169	171	146	139	141	233	199	213
14	201	193	196	182	177	178	148	143	145	209	149	194
15	207	201	204	184	179	182	147	140	143	185	147	164
16	211	207	209	203	139	179	159	147	151	205	185	195
17	209	207	208	190	164	184	170	160	164	215	195	204
18	208	189	202	192	188	190	176	171	173	217	203	211
19	192	164	177	197	191	194	181	173	176	209	189	199
20	193	167	189	197	98	185	177	168	172	202	186	195
21	199	102	127	98	74	84	184	176	180	205	194	200
22	139	115	127	111	87	98	189	180	185	219	196	207
23	153	138	146	129	111	115	199	186	193	221	193	207
24	161	151	156	127	113	120	205	190	199	236	209	222
25	168	160	164	133	126	131	213	196	205	245	218	231
26	173	167	169	138	132	134	218	198	209	253	228	240
27	212	161	174	145	136	139	224	201	214	256	231	242
28	167	73	94	150	143	145	235	203	222	257	233	243
29	---	---	---	157	76	139	243	211	228	256	234	244
30	---	---	---	111	60	75	237	208	224	260	239	249
31	---	---	---	116	90	103	---	---	---	292	238	258
MONTH	242	73	171	203	60	140	243	85	162	292	127	217

02464146 TURKEY CREEK NEAR TUSCALOOSA, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	301	244	270	179	174	176	299	253	277	262	227	246
2	305	212	262	169	73	104	299	246	267	263	237	247
3	258	209	228	110	87	99	271	235	253	289	246	257
4	240	179	218	120	108	111	308	247	269	295	240	265
5	209	192	200	133	121	125	296	231	266	310	245	274
6	231	188	215	151	131	138	298	238	268	306	201	273
7	260	233	245	169	147	154	256	217	230	335	208	287
8	269	193	238	202	163	172	255	216	238	313	204	273
9	194	184	189	195	169	176	297	229	260	307	203	269
10	202	194	198	185	167	172	280	238	263	326	203	279
11	206	189	198	192	176	183	286	230	263	319	204	262
12	198	189	194	221	157	188	283	232	262	278	205	234
13	217	200	209	182	150	168	295	230	264	335	236	255
14	226	207	221	195	179	185	297	234	268	274	236	252
15	202	161	180	214	197	203	275	238	256	271	248	259
16	159	155	156	226	203	213	263	227	243	281	264	271
17	161	154	157	215	206	209	218	176	196	281	270	277
18	166	161	164	230	217	222	408	208	276	289	270	279
19	168	151	161	238	221	227	286	220	249	291	270	281
20	207	150	173	237	214	225	273	221	250	291	270	280
21	250	60	118	258	229	240	288	225	257	291	270	280
22	117	80	98	261	223	242	295	231	263	292	263	280
23	137	118	128	229	206	213	307	198	268	283	228	252
24	139	137	138	228	187	205	316	241	277	244	229	235
25	142	135	138	236	211	223	318	197	277	266	185	221
26	150	139	143	263	168	230	373	158	211	222	185	205
27	158	150	155	227	197	210	254	194	224	253	223	237
28	166	158	162	254	223	243	282	189	232	261	234	253
29	167	164	165	276	238	258	290	98	245	227	204	214
30	177	168	172	289	248	267	368	188	251	238	214	223
31	---	---	---	285	230	262	264	192	249	---	---	---
MONTH	305	60	183	289	73	195	408	98	254	335	185	257
YEAR	408	60	196									

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	23.2	21.4	22.3	15.2	11.4	13.8	9.8	7.0	8.6	11.8	9.3	10.5
2	22.4	20.9	21.6	13.2	10.7	12.2	8.2	4.9	6.8	10.3	8.5	9.5
3	22.1	19.7	21.1	15.3	12.2	13.9	8.5	4.1	6.5	12.8	9.6	11.2
4	19.3	15.8	17.2	16.7	14.7	15.7	8.8	5.4	7.2	9.1	6.5	7.8
5	15.9	13.7	14.9	16.2	14.5	15.5	7.4	4.0	6.0	9.5	4.9	7.2
6	14.5	11.2	13.1	14.2	11.0	12.6	7.3	3.6	5.7	14.7	9.8	12.5
7	14.8	11.6	13.2	12.0	8.4	10.3	10.1	6.5	8.2	16.0	12.0	14.1
8	13.9	10.5	12.3	14.8	12.0	13.6	9.9	6.6	8.5	15.9	9.5	12.4
9	13.3	10.5	12.1	16.1	14.3	15.2	9.6	6.6	8.7	9.3	7.5	7.9
10	15.0	12.0	13.4	17.5	15.5	16.4	6.9	4.5	5.9	12.0	8.1	10.3
11	15.0	11.4	13.3	15.2	12.0	13.3	7.1	5.7	6.7	13.0	11.4	12.2
12	13.4	10.5	12.1	13.8	11.0	12.2	6.2	4.2	5.2	14.4	13.0	13.7
13	11.7	8.5	10.4	15.6	13.7	14.6	5.2	2.0	3.8	13.9	11.9	12.6
14	11.2	7.6	9.6	14.9	13.0	13.9	7.4	2.6	4.9	12.5	11.1	11.7
15	11.6	7.9	9.9	17.4	14.7	16.0	8.7	7.3	8.0	10.9	9.3	10.1
16	13.2	9.3	11.3	18.2	15.8	17.1	7.6	3.5	5.8	10.2	7.5	9.1
17	16.2	12.4	14.2	15.5	11.0	13.3	3.1	.9	2.3	9.2	5.6	7.3
18	17.7	14.1	15.9	13.1	8.4	10.7	2.6	.7	1.6	9.9	5.8	7.7
19	17.8	14.9	16.6	16.5	13.1	14.6	4.3	.7	2.6	9.8	6.7	8.4
20	14.5	12.1	12.8	18.6	13.9	16.4	9.0	3.9	6.4	10.6	7.9	9.6
21	14.6	12.7	13.7	13.7	11.2	12.9	10.7	8.2	9.4	8.0	5.4	6.8
22	14.1	11.3	12.8	11.9	8.7	10.5	12.9	10.5	11.6	8.0	3.6	5.8
23	13.7	10.3	12.2	13.2	9.9	11.5	13.5	12.3	12.7	8.7	4.0	6.5
24	15.0	12.7	13.7	11.4	8.3	10.2	14.6	11.1	13.2	9.6	6.1	7.9
25	13.1	10.0	11.8	13.7	9.5	11.6	10.6	7.4	8.9	10.5	6.2	8.4
26	12.4	10.9	11.7	17.8	13.2	15.3	8.5	5.4	7.1	11.5	7.5	9.6
27	15.3	12.1	13.6	16.4	13.9	15.6	11.9	7.3	9.7	11.5	8.0	10.5
28	15.9	13.9	14.9	13.6	10.1	12.3	12.9	7.3	11.0	9.3	4.9	7.4
29	16.0	14.2	15.2	11.7	8.2	10.0	6.9	4.5	5.8	10.7	6.8	8.8
30	15.7	14.3	15.0	12.8	9.5	11.0	8.4	5.5	6.8	13.3	9.9	11.7
31	14.4	13.5	13.8	---	---	---	11.8	8.6	10.4	11.7	7.2	9.6
MONTH	23.2	7.6	14.1	18.6	8.2	13.4	14.6	.7	7.3	16.0	3.6	9.6

02464146 TURKEY CREEK NEAR TUSCALOOSA, AL--Continued

WATER TEMPERATURE (DEG C) OP WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	14.4	9.7	12.1	8.7	8.1	8.5	14.0	7.1	10.2	19.3	17.8	18.7
2	15.6	12.7	14.0	9.8	8.3	9.1	14.8	7.4	10.9	18.9	14.5	16.8
3	14.0	10.0	12.9	11.5	9.3	10.4	14.8	11.7	13.0	16.4	14.3	15.2
4	9.6	7.1	8.0	11.9	10.4	11.1	17.1	13.5	14.8	14.9	14.0	14.4
5	7.4	6.0	6.8	13.4	10.8	12.6	16.0	11.7	13.8	16.8	14.3	15.3
6	7.3	6.3	6.8	10.4	7.3	8.7	13.3	9.4	11.6	16.9	13.8	15.6
7	7.2	6.0	6.4	7.4	6.8	7.1	15.7	11.1	13.0	15.2	11.6	13.9
8	7.7	5.0	6.2	10.6	5.7	7.9	13.5	10.7	12.2	15.9	11.5	14.0
9	5.9	3.4	4.7	11.6	5.3	8.3	12.4	10.6	11.5	18.1	15.7	16.6
10	6.1	1.4	3.7	13.1	5.9	9.3	11.6	9.4	10.6	19.7	15.5	18.1
11	7.4	2.2	4.8	14.1	7.0	10.5	13.8	7.0	10.1	18.8	14.6	17.0
12	9.4	4.7	7.0	15.1	8.0	11.5	14.8	7.3	10.7	18.2	13.8	16.5
13	11.9	7.7	9.6	14.9	9.4	12.3	16.0	8.4	12.1	17.8	16.2	16.9
14	15.6	11.9	13.6	17.2	11.1	14.1	13.4	9.2	11.7	17.1	15.8	16.4
15	17.1	13.4	15.1	17.5	13.7	15.4	14.5	12.2	13.2	20.3	16.1	18.0
16	14.5	11.2	13.0	15.0	11.0	13.0	17.6	9.6	13.4	20.0	16.0	18.3
17	11.1	8.9	10.0	16.6	9.2	13.1	18.5	10.2	14.3	21.3	16.8	19.2
18	8.7	7.1	7.7	17.3	12.7	15.0	19.6	11.6	15.6	20.3	18.8	19.7
19	8.1	6.7	7.4	14.2	9.9	12.6	17.0	13.0	15.3	22.3	18.7	20.5
20	11.7	8.0	9.2	16.7	11.0	13.6	18.6	12.5	15.6	22.7	20.9	21.6
21	11.9	9.6	11.0	13.0	9.6	11.5	18.4	12.7	15.5	23.6	19.2	21.5
22	9.4	6.1	8.0	10.7	9.0	9.8	19.5	12.4	16.2	22.7	19.8	21.4
23	5.8	3.4	4.7	9.6	9.0	9.3	20.4	14.2	17.5	24.2	20.6	22.3
24	5.9	1.4	3.7	10.0	9.0	9.4	20.8	15.1	18.1	24.8	20.8	22.8
25	6.8	1.7	4.4	11.5	9.2	10.0	20.7	15.3	18.3	25.5	22.1	23.7
26	8.9	6.0	7.5	13.6	9.2	11.2	20.8	15.8	18.4	26.5	23.1	24.7
27	9.6	7.7	8.9	17.0	9.9	13.2	21.3	16.1	19.0	25.6	22.6	24.1
28	11.0	7.6	9.1	18.0	11.2	14.5	21.5	16.4	19.4	24.4	20.2	22.5
29	---	---	---	16.8	12.4	14.4	21.6	18.5	20.2	24.2	18.0	21.4
30	---	---	---	14.2	11.8	12.8	20.5	17.3	19.2	25.3	19.8	22.6
31	---	---	---	12.4	9.3	11.4	---	---	---	24.7	21.7	23.2
MONTH	17.1	1.4	8.4	18.0	5.3	11.3	21.6	7.0	14.5	26.5	11.5	19.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.9	20.4	22.7	23.9	21.8	22.8	24.1	21.2	22.7	28.7	20.0	24.7
2	23.8	20.2	21.6	22.8	20.6	21.6	25.4	22.8	24.2	26.2	20.5	24.2
3	22.1	19.4	20.7	21.4	19.8	20.6	26.7	23.0	25.1	26.0	20.2	23.5
4	21.3	19.5	20.3	21.4	19.4	20.1	26.4	22.9	25.1	24.4	22.6	23.5
5	19.9	18.8	19.4	21.5	19.7	20.4	26.3	22.3	24.7	24.9	20.6	22.7
6	21.3	18.1	19.6	22.8	20.0	21.2	26.9	22.7	24.7	24.2	20.5	22.2
7	21.7	16.7	19.5	23.8	20.5	22.0	24.3	21.9	23.1	22.9	19.6	21.3
8	20.4	19.0	19.7	24.4	20.5	22.3	21.9	19.1	20.7	24.2	19.7	22.0
9	21.9	19.1	20.2	24.8	20.9	22.5	20.8	16.3	18.9	24.9	20.4	22.7
10	22.6	18.1	20.3	24.9	20.4	22.4	21.8	18.0	20.1	25.6	20.5	23.7
11	21.1	19.3	20.0	26.2	20.8	23.2	22.2	17.7	20.2	24.1	22.4	23.2
12	22.9	18.9	20.6	26.3	21.2	23.5	22.1	17.8	20.3	24.6	20.9	22.7
13	23.8	20.4	21.9	24.1	22.0	23.0	21.3	17.0	19.6	25.3	21.4	23.3
14	23.2	20.8	21.8	24.7	22.3	23.3	21.8	17.9	20.3	24.6	21.5	22.9
15	21.2	19.5	20.3	26.1	21.6	23.7	22.9	19.5	21.5	22.0	19.5	21.2
16	21.2	19.3	20.0	24.5	22.7	23.6	22.8	20.4	21.6	19.7	17.6	18.7
17	22.4	17.6	20.0	25.5	21.3	23.3	22.7	19.7	21.2	19.9	15.6	18.1
18	23.5	18.8	21.2	26.0	21.5	23.6	23.9	19.3	21.7	20.4	16.4	18.7
19	23.5	21.1	22.0	26.2	22.9	24.4	23.6	19.8	22.0	20.5	16.2	18.6
20	23.3	20.3	21.6	26.8	23.0	24.8	24.9	20.3	22.8	20.9	17.3	19.1
21	21.6	18.8	19.9	27.3	22.9	25.2	25.4	21.4	23.6	20.6	16.6	19.0
22	20.0	18.1	19.0	28.0	25.0	26.6	26.4	22.0	24.3	21.9	19.9	20.6
23	20.5	17.8	18.9	30.0	26.0	27.8	27.1	22.9	25.0	19.9	16.2	18.8
24	21.6	18.6	20.1	32.6	28.7	30.5	26.4	23.5	25.2	16.2	13.3	15.1
25	22.9	19.6	21.1	---	---	---	27.4	23.7	25.6	16.1	15.0	15.5
26	24.3	19.9	22.0	---	---	---	26.7	23.1	25.0	19.3	16.1	17.6
27	24.5	20.8	22.6	---	---	---	26.0	22.9	24.8	19.1	16.5	18.0
28	24.4	20.9	22.5	---	---	---	26.6	20.8	24.8	18.8	16.5	17.2
29	24.8	21.4	22.8	20.4	15.9	18.3	26.4	20.9	24.8	17.8	16.3	16.9
30	25.7	21.7	23.4	22.2	18.4	20.4	26.0	20.0	23.2	19.5	17.8	1

02464360 BINION CREEK BELOW GIN CREEK NEAR SAMANTHA, AL

LOCATION.--Lat 33°25'24", long 87°38'33", in SW¼ sec. 1, T. 19 S., R. 11 W., Tuscaloosa County, Hydrologic Unit 03160112, at county road, 30 ft downstream from Gin Creek, 1.0 mi downstream from Wolf Creek, and 2.2 mi west of Samantha.

DRAINAGE AREA.--57.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 230 ft, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 12 to Jan. 6. Water-discharge records good except those for period of estimated record, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft³/s, July 2, 1989, gage height, 12.52 ft; minimum, 7.1 ft³/s, June 18, 29, 30, Sept. 2, 3, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
June 15	0600	1,880	11.88
June 21	1445	1,360	11.29
July 2	0930	*2,600	*12.52

Minimum daily discharge, 17 ft³/s, Oct. 14-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	32	58	210	61	316	115	47	20	60	38	31
2	126	28	50	135	54	172	92	55	31	1410	40	27
3	100	25	46	94	52	133	83	38	44	529	43	25
4	68	34	43	87	51	162	333	75	102	293	38	22
5	44	144	40	70	128	346	459	172	165	630	33	22
6	33	106	38	66	253	595	207	184	200	255	31	21
7	27	50	38	62	204	252	160	82	83	154	39	21
8	24	38	36	90	123	159	139	56	159	124	35	21
9	23	35	35	146	86	126	155	54	353	220	30	21
10	21	34	34	294	72	106	119	144	125	369	28	22
11	21	31	36	422	67	94	96	69	206	137	28	23
12	19	31	36	529	62	85	85	49	449	99	27	26
13	18	94	34	948	59	78	78	43	171	160	26	31
14	17	67	34	465	56	74	73	87	198	163	25	30
15	17	47	34	449	53	69	72	135	1450	97	26	60
16	17	40	37	246	49	65	68	73	560	78	27	32
17	17	36	36	166	47	60	63	53	226	73	32	29
18	18	33	34	132	61	59	59	44	135	63	35	27
19	23	51	32	108	81	56	55	55	116	58	31	25
20	24	141	32	93	71	56	56	51	117	61	28	23
21	43	88	32	77	300	190	52	48	687	52	26	22
22	39	54	32	69	186	189	49	42	436	51	25	31
23	30	44	94	64	104	172	46	38	498	101	24	50
24	34	40	105	61	76	164	43	35	181	79	22	32
25	28	36	71	57	68	119	40	33	163	66	22	65
26	24	53	48	54	65	99	39	29	113	52	26	103
27	23	333	42	54	85	86	37	26	80	45	38	50
28	35	199	44	50	696	77	35	24	67	42	36	50
29	53	101	48	48	---	104	34	22	69	41	28	111
30	37	71	66	103	---	347	33	21	61	53	28	243
31	32	---	190	87	---	181	---	21	---	46	34	---
TOTAL	1151	2116	1535	5536	3270	4791	2975	1905	7265	5661	949	1296
MEAN	37.1	70.5	49.5	179	117	155	99.2	61.5	242	183	30.6	43.2
MAX	126	333	190	948	696	595	459	184	1450	1410	43	243
MIN	17	25	32	48	47	56	33	21	20	41	22	21
CFSM	.65	1.24	.87	3.13	2.05	2.71	1.74	1.08	4.25	3.20	.54	.76
IN.	.75	1.38	1.00	3.61	2.13	3.13	1.94	1.24	4.74	3.69	.62	.85

CAL YR 1988 TOTAL 16247.2 MEAN 44.4 MAX 422 MIN 7.2 CFSM .78 IN. 10.60
WTR YR 1989 TOTAL 38450 MEAN 105 MAX 1450 MIN 17 CFSM 1.85 IN. 25.09

02464360 BINION CREEK BELOW GIN CREEK NEAR SAMANTHA, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: October 1986 to current year.
WATER TEMPERATURE: October 1986 to current year.

INSTRUMENTATION.--U.S. Geological Survey mini-monitor October 1986 to current year.

REMARKS.--Miscellaneous samples of chemical data published for water years 1982-1986.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 231 microsiemens, Oct. 17, 1988; minimum, 16 microsiemens, June 25-26, 1987.
WATER TEMPERATURE: Maximum, 28.3°C, July 15, 1988; minimum, 0°C, Jan. 10, 11, 1988.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 231 microsiemens, Oct. 17; minimum, 25 microsiemens, June 21, 23.
WATER TEMPERATURE: Maximum, 26.0°C, Aug. 25, 28; minimum, 2.0°C, Feb. 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT											
05...	0930	43	76	77	5.80	--	16.0	762	8.1	82	--
NOV											
02...	0850	28	63	--	6.30	--	12.5	755	9.4	89	--
30...	0900	70	72	--	6.50	--	9.0	759	10.2	89	--
JAN											
04...	1230	78	60	61	6.30	10.0	9.0	761	10.4	90	65
FEB											
02...	0830	52	55	--	6.50	--	13.5	757	9.4	91	--
28...	1430	1060	42	--	6.20	--	9.5	755	10.4	92	--
APR											
03...	1045	82	55	51	6.60	--	15.0	754	9.4	94	130
MAY											
02...	1045	53	40	--	6.30	--	17.0	757	8.1	84	--
JUN											
01...	0830	20	62	--	6.40	--	22.0	760	7.4	85	--
JUL											
05...	1200	725	30	29	5.80	25.0	21.5	752	7.4	85	2200
AUG											
01...	0800	37	54	--	6.50	--	24.0	755	7.6	91	--
SEP											
08...	0830	20	50	--	6.30	--	20.5	755	8.6	96	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT											
05...	210	27	27	5.5	3.3	1.5	10	0.1	1.3	6.80	19
JAN											
04...	80	20	20	4.2	2.4	1.4	12	.1	1.0	6.40	14
APR											
03...	130	17	17	3.7	2.0	1.4	14	.1	.80	6.56	10
JUL											
05...	1300	10	10	2.2	1.0	.80	14	.1	.90	5.74	4.3

02464360 BINION CREEK BELOW GIN CREEK NEAR SAMANTHA, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
05...	2.4	0.20	9.8	77	44	0.10	8.96	0.060	0.010	0.070
JAN										
04...	2.5	.10	8.3	40	34	.05	8.42	--	<.010	.080
APR										
03...	1.5	<.10	7.1	36	27	.05	7.97	--	<.010	.070
JUL										
05...	1.0	.20	5.6	26	16	.03	50.9	.020	.020	.040

DATE	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT										
05...	0.37	0.44	0.030	0.010	0.02	30	2600	150	410	360
JAN										
04...	.30	.38	.020	.020	0	<20	1300	30	240	230
APR										
03...	<.20	--	<.020	.010	--	<20	1600	130	240	220
JUL										
05...	.50	.54	.050	.050	0	<20	2300	200	210	160

02464360 BINION CREEK BELOW GIN CREEK NEAR SAMANTHA, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	96	81	86	63	56	58	66	64	64	---	---	---
2	105	97	101	64	45	58	66	65	65	---	---	---
3	111	100	104	46	44	45	---	---	---	---	---	---
4	107	101	104	47	45	43	---	---	---	---	---	---
5	112	91	101	91	61	76	---	---	---	---	---	---
6	121	102	112	---	---	---	---	---	---	---	---	---
7	129	120	124	---	---	---	---	---	---	80	63	69
8	137	130	133	---	---	---	---	---	---	105	82	92
9	147	137	142	---	---	---	---	---	---	95	78	86
10	150	147	149	---	---	---	---	---	---	84	66	74
11	155	149	152	---	---	---	---	---	---	93	44	70
12	164	155	159	---	---	---	---	---	---	49	43	46
13	167	162	163	---	---	---	---	---	---	49	38	45
14	172	168	171	---	---	---	---	---	---	52	39	43
15	181	169	173	---	---	---	---	---	---	50	44	46
16	202	176	185	---	---	---	---	---	---	54	46	50
17	231	206	223	---	---	---	---	---	---	59	54	56
18	227	219	223	---	---	---	---	---	---	61	57	59
19	222	214	218	---	---	---	---	---	---	62	60	61
20	217	187	204	---	---	---	---	---	---	64	61	63
21	185	101	142	---	---	---	---	---	---	63	60	62
22	99	93	95	---	---	---	---	---	---	64	61	63
23	98	81	88	---	---	---	---	---	---	64	61	62
24	79	68	72	---	---	---	---	---	---	63	60	61
25	70	67	68	---	---	---	---	---	---	63	59	61
26	68	64	66	---	---	---	---	---	---	64	59	61
27	75	67	71	---	---	---	---	---	---	61	57	60
28	76	67	73	---	---	---	---	---	---	62	55	59
29	66	46	57	---	---	---	---	---	---	61	57	60
30	45	41	43	---	---	---	---	---	---	64	37	54
31	56	45	50	---	---	---	---	---	---	47	36	42
MONTH	231	41	124	---	---	---	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
1	54	45	50	52	38	45	67	53	59	86	42	60
2	62	52	56	59	52	54	63	50	58	47	39	43
3	63	58	60	61	55	58	57	45	54	51	46	48
4	65	57	60	63	52	58	79	43	53	51	43	49
5	75	45	59	50	43	47	51	43	46	51	32	42
6	50	44	46	48	34	38	51	40	45	45	40	42
7	54	46	50	51	39	45	55	46	50	55	41	49
8	60	52	56	55	52	53	62	49	54	64	54	58
9	62	58	59	58	52	54	64	48	52	69	62	65
10	64	59	61	58	52	55	56	50	54	72	40	53
11	63	61	62	57	47	55	57	50	55	74	53	63
12	64	62	63	59	54	57	61	55	58	77	74	75
13	65	62	64	60	55	58	60	54	57	79	76	78
14	66	63	64	62	46	58	59	44	56	78	53	71
15	71	65	68	61	55	59	63	56	58	53	45	48
16	73	70	71	64	59	61	60	45	57	63	47	54
17	73	67	71	66	61	63	60	55	57	76	64	70
18	73	69	70	66	61	64	71	56	62	76	67	71
19	70	59	62	69	63	65	87	58	72	70	61	65
20	67	60	64	71	64	68	60	52	55	64	61	62
21	65	54	57	77	44	60	60	48	51	66	63	64
22	61	55	58	50	44	47	50	46	48	68	62	65
23	65	61	63	63	49	55	53	47	50	70	66	68
24	67	64	66	50	46	48	65	48	52	70	64	66
25	70	66	68	54	49	52	67	47	51	69	64	66
26	72	70	71	65	53	56	53	47	50	71	69	70
27	77	72	73	118	53	78	52	48	50	71	69	70
28	70	38	49	66	53	62	54	48	50	69	63	66
29	---	---	---	58	46	55	53	49	51	64	61	62
30	---	---	---	47	39	42	52	48	50	64	61	62
31	---	---	---	50	39	46	---	---	---	64	59	62
MONTH	77	38	61	118	34	55	87	40	54	86	32	61

02464360 BINION CREEK BELOW GIN CREEK NEAR SAMANTHA, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	67	61	64	58	53	55	63	44	56	47	43	45
2	68	56	64	55	26	36	62	56	59	46	41	44
3	63	52	56	36	31	33	55	50	52	50	44	47
4	59	40	46	36	26	34	80	49	60	69	50	56
5	53	40	45	37	29	32	80	51	63	74	68	71
6	52	41	45	42	32	37	88	53	62	84	58	66
7	57	46	50	47	42	45	87	51	59	62	54	58
8	61	45	56	52	44	49	84	48	56	---	---	---
9	52	43	46	57	28	41	80	47	57	71	47	54
10	58	45	53	40	32	35	68	40	55	85	48	57
11	89	58	70	51	41	47	65	49	53	75	46	53
12	75	42	49	59	44	53	66	48	54	81	36	55
13	56	47	51	93	77	83	74	38	51	48	37	42
14	70	47	54	82	61	68	57	46	49	76	37	51
15	49	35	42	74	63	68	67	46	53	57	41	45
16	42	35	39	83	69	73	65	44	48	44	39	42
17	48	37	45	79	63	70	49	45	47	97	41	53
18	54	48	51	79	62	69	58	39	46	80	41	49
19	75	49	56	72	62	66	56	39	44	80	42	52
20	51	39	47	73	60	65	51	44	46	87	42	52
21	54	25	37	66	60	63	57	42	45	74	43	51
22	31	26	28	73	60	64	45	40	42	92	39	49
23	34	25	30	73	40	50	55	41	44	84	42	50
24	61	34	39	52	40	47	52	42	45	68	41	51
25	52	45	48	60	44	51	58	40	45	52	44	47
26	55	44	50	59	44	54	59	30	41	50	42	44
27	60	54	57	63	57	60	51	29	34	54	44	49
28	59	55	57	62	60	61	60	32	39	60	44	57
29	57	53	55	67	56	59	52	44	47	54	28	39
30	59	55	57	77	44	61	52	46	49	70	31	44
31	---	---	---	65	44	51	65	47	50	---	---	---
MONTH	89	25	50	93	26	54	88	29	50	---	---	---

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.8	20.1	20.5	13.3	11.0	13.0	9.3	7.7	8.5	---	---	---
2	20.3	17.8	19.9	15.3	11.3	13.0	7.6	6.3	6.8	---	---	---
3	20.6	18.4	20.1	16.5	13.6	14.4	---	---	---	---	---	---
4	19.5	17.1	17.8	17.7	15.9	15.0	---	---	---	---	---	---
5	17.1	14.1	15.6	16.7	13.9	15.9	---	---	---	---	---	---
6	14.8	13.2	14.1	---	---	---	---	---	---	---	---	---
7	14.6	12.3	13.6	---	---	---	---	---	---	15.3	12.5	13.6
8	13.3	10.3	12.2	---	---	---	---	---	---	15.4	12.4	14.2
9	12.8	10.8	11.6	---	---	---	---	---	---	12.2	8.9	10.2
10	14.2	11.8	13.8	---	---	---	---	---	---	10.5	8.6	9.4
11	14.4	11.7	13.0	---	---	---	---	---	---	12.1	10.5	11.3
12	13.6	11.7	12.4	---	---	---	---	---	---	13.9	12.0	12.7
13	12.1	10.1	11.3	---	---	---	---	---	---	13.9	11.4	12.4
14	10.8	8.5	9.4	---	---	---	---	---	---	11.9	10.7	11.3
15	10.6	8.7	9.6	---	---	---	---	---	---	11.8	9.9	10.9
16	12.9	8.3	10.6	---	---	---	---	---	---	10.0	8.8	9.5
17	14.9	11.9	13.2	---	---	---	---	---	---	8.6	6.6	7.7
18	16.0	12.3	14.5	---	---	---	---	---	---	8.6	6.3	7.5
19	16.3	14.9	15.5	---	---	---	---	---	---	9.3	7.5	8.3
20	14.9	12.9	13.5	---	---	---	---	---	---	10.6	9.3	9.9
21	13.8	13.1	13.4	---	---	---	---	---	---	9.3	7.1	7.9
22	13.3	11.9	12.6	---	---	---	---	---	---	7.2	5.2	6.4
23	13.0	11.2	12.1	---	---	---	---	---	---	7.9	5.2	6.6
24	12.9	10.2	12.3	---	---	---	---	---	---	9.2	7.1	8.1
25	13.1	10.5	11.9	---	---	---	---	---	---	9.9	7.5	8.9
26	12.3	11.1	11.7	---	---	---	---	---	---	11.0	8.8	9.7
27	14.3	11.6	12.8	---	---	---	---	---	---	11.5	9.9	10.9
28	14.7	11.0	13.4	---	---	---	---	---	---	9.6	7.5	8.5
29	14.5	12.6	13.8	---	---	---	---	---	---	9.9	7.9	8.8
30	14.2	11.9	13.5	10.7	9.0	9.7	---	---	---	12.9	9.3	11.6
31	13.7	13.2	13.4	---	---	---	---	---	---	11.2	8.4	10.4
MONTH	20.8	8.3	13.6	---	---	---	---	---	---	---	---	---

02464360 BINION CREEK BELOW GIN CREEK NEAR SAMANTHA, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.8	10.0	11.7	8.2	7.1	7.4	14.9	11.6	13.3	19.8	18.2	19.1
2	15.7	13.4	14.3	8.1	6.9	7.4	15.4	11.5	13.4	18.4	16.5	17.4
3	15.2	8.3	13.2	8.5	6.0	8.0	16.0	14.6	16.0	16.5	15.3	15.7
4	12.3	8.8	10.2	9.9	6.6	8.2	16.0	14.5	15.5	15.3	14.1	14.5
5	8.7	7.2	7.8	14.0	11.1	12.5	15.1	13.1	14.1	16.5	14.3	15.0
6	7.4	5.8	6.6	12.2	6.8	9.2	13.4	10.5	11.7	16.7	14.9	15.8
7	5.7	4.7	5.3	6.6	5.2	5.7	14.2	10.9	12.4	15.8	13.2	14.6
8	5.9	3.8	5.0	7.8	4.1	5.9	13.4	11.6	12.3	15.8	12.9	14.3
9	5.2	3.5	4.5	9.2	5.4	7.0	12.5	10.7	11.3	17.0	14.5	15.4
10	4.5	2.0	3.5	11.2	6.1	9.2	10.6	9.4	10.0	17.5	15.3	16.6
11	5.9	2.7	4.4	12.7	8.7	10.8	10.7	7.1	8.9	16.3	11.0	14.9
12	8.6	5.2	6.6	14.3	10.1	12.4	11.9	7.9	9.9	16.0	13.1	14.4
13	12.3	6.6	9.9	15.0	12.0	13.6	13.5	9.7	11.6	15.2	14.4	14.8
14	16.0	12.4	14.2	17.6	13.9	15.7	13.0	11.0	11.9	14.3	13.7	13.9
15	18.2	15.8	16.9	18.9	15.0	17.5	13.6	12.2	12.8	16.8	13.6	14.4
16	17.6	14.5	16.2	17.3	14.7	15.9	15.2	11.2	13.2	17.3	13.5	15.3
17	14.3	11.5	12.8	16.7	12.9	14.9	16.4	12.6	14.6	18.6	15.8	16.9
18	11.4	9.1	10.1	18.2	15.7	16.9	17.7	14.0	15.9	18.4	16.8	17.9
19	9.4	8.6	9.0	17.2	14.4	15.5	17.3	15.5	16.3	20.0	17.4	18.6
20	12.0	9.4	10.3	17.6	14.3	15.9	17.3	14.1	15.7	20.8	19.2	20.2
21	13.2	12.1	12.7	16.4	12.2	14.1	17.6	14.9	16.1	19.7	17.2	18.5
22	12.1	8.2	10.3	12.0	10.6	11.3	18.3	14.9	16.6	20.4	18.6	20.4
23	7.9	5.2	6.3	11.4	10.5	10.8	19.4	16.4	17.9	---	---	---
24	5.8	3.2	4.7	10.7	10.0	10.4	20.4	17.6	18.9	21.8	20.5	21.0
25	7.0	3.6	5.2	12.2	10.4	11.2	20.4	17.7	19.1	23.2	21.1	22.0
26	9.5	7.0	8.0	14.6	11.3	12.6	20.2	18.0	19.1	24.1	22.2	23.0
27	10.5	9.6	10.1	17.6	13.2	15.2	20.4	18.1	19.1	23.3	17.4	20.7
28	9.8	8.2	8.9	19.2	15.4	17.2	20.9	18.5	19.9	22.2	18.5	21.3
29	---	---	---	18.8	15.2	17.3	21.5	19.7	20.4	22.1	17.6	20.7
30	---	---	---	18.5	14.8	16.0	20.6	19.1	19.9	21.1	18.5	19.5
31	---	---	---	17.5	14.6	16.2	---	---	---	23.0	19.1	22.2
MONTH	18.2	2.0	9.2	19.2	4.1	12.3	21.5	7.1	14.9	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.6	16.6	18.6	22.7	21.5	21.9	24.4	23.7	23.4	25.6	23.6	24.5
2	22.6	20.4	21.8	21.2	20.1	20.7	24.6	23.1	23.8	25.6	24.1	24.7
3	21.7	20.7	21.1	21.3	20.2	20.6	25.3	23.3	24.3	25.0	23.3	24.2
4	20.8	20.1	20.4	21.7	20.1	20.7	25.3	23.4	24.4	23.8	22.6	23.2
5	20.2	19.7	19.9	21.3	20.7	21.0	25.3	23.7	24.5	23.7	21.6	22.6
6	20.3	12.5	17.9	22.1	20.4	21.1	25.4	23.6	24.5	23.1	21.1	22.1
7	20.1	13.3	18.7	22.8	20.9	21.8	24.3	23.1	23.6	22.9	20.6	21.7
8	20.1	18.9	19.5	22.9	21.2	21.9	22.9	20.1	21.5	23.5	20.8	22.2
9	20.7	19.0	19.7	23.1	21.1	21.9	20.7	18.7	19.7	23.4	21.3	22.4
10	20.0	18.5	19.2	22.7	20.9	21.7	21.2	18.8	20.0	23.8	22.4	23.1
11	21.0	19.1	20.0	23.0	20.6	21.8	21.4	17.6	20.0	23.7	22.8	23.2
12	20.8	19.7	20.9	23.5	21.2	22.4	21.6	19.1	20.5	23.7	22.1	22.9
13	---	---	---	23.0	21.5	22.2	21.9	17.6	20.5	24.2	22.2	23.0
14	---	---	---	23.2	21.5	22.3	21.5	19.2	20.5	24.2	22.8	23.5
15	---	---	---	23.4	21.3	22.3	22.5	20.2	21.2	23.3	21.1	22.2
16	19.2	18.3	18.9	22.9	21.7	22.1	22.2	21.1	21.6	20.8	19.6	20.1
17	19.9	17.4	19.0	22.5	21.0	21.7	22.2	20.6	21.3	20.3	18.4	19.3
18	20.8	17.3	19.6	22.7	20.9	21.9	22.8	20.8	21.7	19.4	16.0	17.5
19	21.6	20.0	20.6	22.6	21.3	22.0	23.0	21.2	22.0	---	---	---
20	20.9	18.1	20.0	22.8	21.2	22.0	23.4	21.3	22.3	---	---	---
21	21.1	18.2	20.1	22.1	19.8	21.2	24.2	21.8	22.9	20.4	18.4	20.5
22	20.4	19.5	20.0	21.2	20.3	20.8	24.3	22.4	23.4	21.2	19.9	20.5
23	20.6	19.0	19.8	20.8	19.9	20.5	25.0	22.9	23.9	20.8	18.3	20.6
24	20.2	19.5	19.8	22.7	20.1	21.0	25.4	23.4	24.4	---	---	---
25	---	---	---	22.6	19.5	22.0	26.0	23.5	24.7	---	---	---
26	23.4	20.2	21.7	---	---	---	25.8	23.7	24.8	---	---	---
27	23.5	21.6	22.6	---	---	---	25.8	23.8	24.7	---	---	---
28	23.0	21.4	22.2	---	---	---	26.0	24.2	25.1	---	---	---
29	22.8	21.1	21.9	---	---	---	25.7	24.3	25.0	---	---	---
30	23.4	21.6	22.4	---	---	---	24.8	23.8	24.3	---	---	---
31	---	---	---	---	---	---	24.9	23.1	23.9	---	---	---
MONTH	---	---	---	---	---	---	26.0	17.6	22.9	---	---	---

02464800 LAKE TUSCALOOSA NEAR TUSCALOOSA, AL

LOCATION.--Lat 33°16'02", long 87°30'22", in NW¼ sec. 32, T. 20 S., R. 9 W., Tuscaloosa County, Hydrologic Unit 03160112, at spillway of dam, 4 mi northeast of Northport, 5.5 mi northeast of Tuscaloosa.

DRAINAGE AREA.--416 mi².

WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1982 to current year (elevations only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 229.96 ft, Dec. 3, 1983; minimum, 220.22, Nov. 16, 1987.

EXTREMES FOR CURRENT WATER YEAR.--Maximum gage height, 226.14 ft, Jan. 13; minimum observed, 222.80, Oct. 1.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222.80	223.25	223.81	224.50	223.72	225.38	224.22	223.40	223.25	223.56	223.40	223.20
2	223.10	223.24	223.70	224.45	223.70	224.80	224.04	223.42	223.26	224.81	223.39	223.19
3	223.30	223.23	223.62	224.23	223.68	224.39	223.93	223.40	223.28	225.51	223.39	223.17
4	223.30	223.25	223.57	224.13	223.64	224.24	224.04	223.42	223.35	224.90	223.37	223.13
5	223.30	223.47	223.51	224.01	223.68	224.47	224.97	223.56	223.46	224.68	223.35	223.10
6	223.30	223.59	223.47	223.92	224.14	225.27	224.87	224.01	223.70	224.44	223.34	223.08
7	223.32	223.56	223.44	223.84	224.53	225.11	224.48	224.02	223.73	224.17	223.34	223.06
8	223.29	223.51	223.42	223.82	224.39	224.57	224.23	223.85	223.72	223.98	223.32	223.03
9	223.26	223.46	223.41	223.91	224.18	224.26	224.15	223.74	224.02	223.88	223.29	223.01
10	223.24	223.43	223.38	224.26	224.01	224.07	224.04	223.76	224.04	224.00	223.27	223.00
11	223.22	223.39	223.38	224.62	223.91	223.96	223.93	223.70	224.00	224.04	223.26	223.01
12	223.20	223.36	223.36	225.22	223.83	223.88	223.85	223.61	224.49	224.00	223.26	223.01
13	223.17	223.42	223.34	225.89	223.76	223.82	223.79	223.55	224.32	224.04	223.24	223.03
14	223.14	223.47	223.33	225.92	223.72	223.77	223.74	223.55	224.16	224.37	223.23	223.06
15	223.12	223.48	223.34	225.35	223.69	223.74	223.72	223.64	225.29	224.24	223.24	223.11
16	223.10	223.48	223.33	224.90	223.65	223.70	223.68	223.63	225.52	224.04	223.24	223.10
17	223.08	223.47	223.31	224.48	223.62	223.65	223.65	223.58	224.82	223.91	223.25	223.09
18	223.07	223.41	223.29	224.22	223.61	223.64	223.62	223.52	224.34	223.81	223.28	223.08
19	223.10	223.40	223.28	224.06	223.64	223.61	223.60	223.50	224.10	223.74	223.28	223.05
20	223.08	223.74	223.28	223.95	223.66	223.59	223.58	223.49	223.97	223.70	223.26	223.04
21	223.11	223.95	223.28	223.84	224.09	223.84	223.55	223.48	224.31	223.64	223.25	223.03
22	223.12	223.85	223.29	223.77	224.58	224.07	223.52	223.45	224.73	223.59	223.23	223.03
23	223.12	223.73	223.41	223.71	224.35	224.11	223.49	223.44	224.61	223.61	223.22	223.09
24	223.13	223.64	223.54	223.67	224.11	224.16	223.47	223.41	224.32	223.63	223.20	223.09
25	223.11	223.56	223.62	223.63	223.95	224.12	223.45	223.38	224.09	223.62	223.19	223.16
26	223.11	223.55	223.61	223.61	223.87	224.02	223.44	223.37	223.92	223.58	223.20	223.31
27	223.09	224.15	223.57	223.59	223.83	223.93	223.42	223.36	223.78	223.56	223.27	223.33
28	223.11	224.33	223.59	223.56	224.86	223.85	223.40	223.34	223.69	223.51	223.26	223.37
29	223.17	224.13	223.59	223.54	---	223.84	223.38	223.30	223.63	223.46	223.24	223.52
30	223.21	223.95	223.60	223.62	---	224.35	223.38	223.28	223.58	223.43	223.23	223.74
31	223.23	---	223.89	223.71	---	224.45	---	223.26	---	223.42	223.22	---
TOTAL	6918.00	6707.45	6927.56	6949.93	6270.41	6948.66	6714.63	6929.42	6721.48	6942.87	6921.51	6694.22
MEAN	223.16	223.58	223.47	224.19	223.94	224.15	223.82	223.53	224.05	223.96	223.27	223.14
MAX	223.32	224.33	223.89	225.92	224.86	225.38	224.97	224.02	225.52	225.51	223.40	223.74
MIN	222.80	223.23	223.28	223.54	223.61	223.59	223.38	223.26	223.25	223.42	223.19	223.00

CAL YR 1988 TOTAL 81636.25 MEAN 223.05 MAX 224.40 MIN 221.29
WTR YR 1989 TOTAL 81646.14 MEAN 223.69 MAX 225.92 MIN 222.80

02464800 LAKE TUSCALOOSA NEAR TUSCALOOSA, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1982 to current year.
WATER TEMPERATURES: October 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1982.

REMARKS.--Miscellaneous samples of chemical data published for water year 1975. Interruptions in the daily record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 94 microsiemens, Jan. 16, 1989; minimum, 33 microsiemens, July 6, 1983.
pH: Maximum, 7.8 units, June 13, 14, 18, 1986; minimum, 5.4 units, Oct. 12, 22, 1983, Oct. 7, 1984, Jan. 1, June 28, 1985.
WATER TEMPERATURES: Maximum, 36.0°C, June 25, 1984; minimum, 6.0°C, Feb. 22, 1985.
DISSOLVED OXYGEN: Maximum, 14.1 mg/L, June 4, 1985; minimum, 2.5 mg/L, Sept. 3, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 94 microsiemens, Jan. 16; minimum, 56 microsiemens, Aug. 26.
WATER TEMPERATURES: Maximum, 28.6°C, Sept. 15; minimum, 9.4°C, Feb. 26-28, Mar. 5, 8.

02464800 LAKE TUSCALOOSA NEAR TUSCALOOSA, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
OCT											
06...	1030	--	--	77	79	6.50	23.5	--	764	7.3	86
NOV											
03...	1015	--	--	82	--	6.80	19.0	--	753	8.0	87
DEC											
01...	1430	--	--	89	--	6.50	14.5	--	760	9.4	92
JAN											
09...	0845	--	--	91	92	6.50	11.0	--	763	8.3	75
FEB											
03...	1100	--	--	89	--	6.50	11.0	--	758	9.6	87
MAR											
03...	1415	--	--	69	--	6.80	10.0	--	760	10.1	90
APR											
05...	1015	--	--	66	67	6.70	15.0	--	759	9.8	98
MAY											
03...	0745	--	--	63	--	6.60	23.0	--	757	8.2	96
19...	0850	25.0	--	70	--	6.80	21.5	117	--	9.4	--
19...	0851	25.0	5.00	70	--	6.80	20.0	--	--	9.0	--
19...	0852	25.0	10.0	70	--	6.70	19.5	--	--	8.7	--
19...	0853	25.0	15.0	70	--	6.70	16.5	--	--	8.3	--
19...	0854	25.0	20.0	70	--	6.70	14.5	--	--	7.6	--
19...	0855	25.0	25.0	69	--	6.70	13.0	--	--	7.4	--
19...	0856	25.0	30.0	70	--	6.70	12.0	--	--	7.7	--
19...	0857	25.0	35.0	73	--	6.60	10.5	--	--	8.1	--
19...	0858	25.0	40.0	73	--	6.60	10.5	--	--	8.3	--
19...	0859	25.0	45.0	72	--	6.60	10.0	--	--	8.4	--
19...	0900	25.0	50.0	72	--	6.60	10.0	--	--	8.4	--
19...	0901	25.0	55.0	72	--	6.60	10.0	--	--	8.4	--
19...	0902	25.0	60.0	71	--	6.60	10.0	--	--	8.2	--
19...	0905	50.0	--	67	--	6.80	21.0	--	--	8.9	--
19...	0906	50.0	5.00	68	--	6.80	20.5	--	--	8.9	--
19...	0907	50.0	10.0	68	--	6.80	19.5	--	--	8.6	--
19...	0908	50.0	15.0	69	--	6.70	17.0	--	--	8.1	--
19...	0909	50.0	20.0	68	--	6.70	14.0	--	--	7.6	--
19...	0910	50.0	25.0	68	--	6.60	13.0	--	--	7.6	--
19...	0911	50.0	30.0	70	--	6.60	11.5	--	--	7.8	--
19...	0912	50.0	35.0	71	--	6.60	10.5	--	--	9.9	--
19...	0913	50.0	40.0	72	--	6.60	10.5	--	--	10.2	--
19...	0914	50.0	45.0	72	--	6.60	10.0	--	--	10.2	--
19...	0915	50.0	50.0	71	--	6.60	10.0	--	--	10.1	--
19...	0916	50.0	55.0	71	--	6.60	10.0	--	--	10.0	--
19...	0917	50.0	60.0	70	--	6.60	10.0	--	--	9.9	--
19...	0918	50.0	65.0	70	--	6.60	10.0	--	--	9.8	--
19...	0919	50.0	70.0	69	--	6.50	10.0	--	--	9.9	--
19...	0920	50.0	75.0	68	--	6.50	10.0	--	--	9.9	--
19...	0921	50.0	80.0	68	--	6.50	10.0	--	--	9.6	--
19...	0922	50.0	90.0	68	--	6.50	10.0	--	--	9.6	--
19...	0925	75.0	--	68	--	6.60	21.0	--	--	9.0	--
19...	0926	75.0	5.00	68	--	6.70	21.0	--	--	9.0	--
19...	0927	75.0	10.0	68	--	6.70	19.5	--	--	8.9	--
19...	0928	75.0	15.0	69	--	6.70	17.0	--	--	8.2	--
19...	0929	75.0	20.0	68	--	6.70	14.5	--	--	7.7	--
19...	0930	75.0	25.0	68	--	6.60	12.5	--	--	9.2	--
19...	0931	75.0	30.0	70	--	6.50	11.5	--	--	9.2	--
19...	0932	75.0	35.0	72	--	6.50	11.0	--	--	9.8	--
19...	0933	75.0	40.0	71	--	6.50	10.5	--	--	9.8	--
19...	0934	75.0	45.0	72	--	6.50	10.0	--	--	10.0	--
19...	0935	75.0	50.0	71	--	6.50	10.0	--	--	9.9	--
19...	0936	75.0	55.0	70	--	6.40	10.0	--	--	9.9	--
19...	0937	75.0	60.0	70	--	6.50	10.0	--	--	9.8	--
19...	0938	75.0	65.0	70	--	6.50	10.0	--	--	9.7	--
19...	0939	75.0	70.0	69	--	6.50	10.0	--	--	9.8	--
19...	0940	75.0	75.0	69	--	6.40	10.0	--	--	9.6	--
19...	0941	75.0	77.0	68	--	6.40	10.0	--	--	9.6	--
JUN											
01...	1415	--	--	62	--	6.90	29.0	--	760	8.0	104

02464800 LAKE TUSCALOOSA NEAR TUSCALOOSA, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUL											
07...	0930	--	--	65	6.10	27.0	26.5	--	757	8.1	102
31...	0830	75.0	--	50	6.90	--	30.5	75.0	--	7.5	--
31...	0831	75.0	5.0	49	6.90	--	30.5	--	--	7.5	--
31...	0832	75.0	10.0	49	6.40	--	26.0	--	--	6.1	--
31...	0833	75.0	12.0	49	5.90	--	25.5	--	--	4.5	--
31...	0834	75.0	15.0	51	5.80	--	23.5	--	--	2.4	--
31...	0835	75.0	17.0	52	5.80	--	22.5	--	--	1.8	--
31...	0836	75.0	20.0	54	5.70	--	22.0	--	--	0.9	--
31...	0837	75.0	22.0	53	5.70	--	21.0	--	--	0.9	--
31...	0838	75.0	25.0	56	5.80	--	20.0	--	--	0.7	--
31...	0839	75.0	30.0	59	5.90	--	17.5	--	--	2.0	--
31...	0840	75.0	35.0	57	5.90	--	14.5	--	--	4.0	--
31...	0841	75.0	40.0	57	5.90	--	12.5	--	--	4.7	--
31...	0842	75.0	45.0	58	5.90	--	11.5	--	--	5.3	--
31...	0843	75.0	50.0	58	6.00	--	11.0	--	--	5.6	--
31...	0844	75.0	55.0	58	6.00	--	11.0	--	--	5.7	--
31...	0845	75.0	60.0	58	6.00	--	10.5	--	--	5.5	--
31...	0846	75.0	65.0	59	6.00	--	10.5	--	--	5.3	--
31...	0847	75.0	68.0	59	6.00	--	10.5	--	--	4.8	--
31...	0848	50.0	--	47	6.80	--	30.0	--	--	7.8	--
31...	0849	50.0	5.0	47	6.90	--	30.0	--	--	8.4	--
31...	0850	50.0	10.0	47	6.50	--	26.5	--	--	6.7	--
31...	0851	50.0	12.0	49	6.00	--	24.5	--	--	4.2	--
31...	0852	50.0	15.0	50	5.90	--	22.5	--	--	2.1	--
31...	0853	50.0	17.0	51	5.80	--	22.0	--	--	1.4	--
31...	0854	50.0	20.0	52	5.80	--	21.5	--	--	0.9	--
31...	0855	50.0	22.0	53	5.80	--	21.0	--	--	0.7	--
31...	0856	50.0	25.0	54	5.80	--	20.5	--	--	0.6	--
31...	0857	50.0	30.0	58	5.80	--	17.0	--	--	1.4	--
31...	0858	50.0	35.0	56	5.90	--	15.0	--	--	3.5	--
31...	0859	50.0	40.0	55	5.90	--	12.5	--	--	4.3	--
31...	0900	50.0	45.0	56	6.00	--	11.5	--	--	5.2	--
31...	0901	50.0	50.0	57	6.00	--	11.0	--	--	5.6	--
31...	0902	50.0	55.0	57	5.90	--	11.0	--	--	5.7	--
31...	0903	50.0	60.0	57	6.00	--	10.5	--	--	5.7	--
31...	0904	50.0	65.0	58	6.00	--	10.5	--	--	5.4	--
31...	0905	50.0	70.0	57	6.00	--	10.5	--	--	5.3	--
31...	0906	50.0	80.0	--	--	--	10.0	--	--	5.1	--
31...	0907	50.0	90.0	--	--	--	10.5	--	--	5.4	--
31...	0908	50.0	95.0	--	--	--	10.5	--	--	5.3	--
31...	0915	25.0	--	47	6.70	--	30.0	--	--	7.8	--
31...	0916	25.0	5.0	47	6.80	--	30.0	--	--	7.8	--
31...	0917	25.0	10.0	47	6.50	--	26.5	--	--	6.9	--
31...	0918	25.0	12.0	48	6.10	--	24.5	--	--	4.0	--
31...	0919	25.0	15.0	48	5.90	--	22.5	--	--	1.9	--
31...	0920	25.0	17.0	49	5.80	--	22.0	--	--	1.3	--
31...	0921	25.0	20.0	51	5.80	--	21.5	--	--	1.0	--
31...	0922	25.0	22.0	52	5.80	--	21.0	--	--	0.6	--
31...	0923	25.0	25.0	53	5.80	--	20.0	--	--	0.6	--
31...	0924	25.0	30.0	57	5.80	--	17.0	--	--	1.3	--
31...	0925	25.0	35.0	55	5.90	--	14.5	--	--	3.3	--
31...	0926	25.0	40.0	54	5.90	--	12.5	--	--	4.2	--
31...	0927	25.0	45.0	56	5.90	--	11.5	--	--	5.2	--
31...	0928	25.0	50.0	56	6.00	--	11.0	--	--	5.4	--
31...	0929	25.0	55.0	57	6.00	--	10.5	--	--	5.7	--
31...	0930	25.0	60.0	57	6.00	--	10.5	--	--	5.7	--
31...	0931	25.0	65.0	58	6.00	--	10.5	--	--	5.3	--
31...	0932	25.0	68.0	58	6.00	--	10.0	--	--	5.3	--
AUG											
03...	0930	--	--	64	6.80	--	22.0	--	756	7.4	85
SEP											
08...	1230	--	--	60	6.30	--	23.0	--	754	7.5	88

02464800 LAKE TUSCALOOSA NEAR TUSCALOOSA, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	PH LAB (STAND- ARD UNITS)
OCT											
06...	13	1	22	22	3.5	3.1	3.9	27	0.4	1.2	6.90
JAN											
09...	1	4	26	26	4.6	3.5	4.8	28	.4	1.2	6.90
APR											
05...	K5	K12	21	21	3.9	2.7	2.9	22	.3	1.1	6.47
JUL											
07...	37	K11	19	19	3.5	2.4	2.3	20	.2	1.0	6.23

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT											
06...	19	3.8	0.20	6.4	70	41	0.09	0	0.080	0.010	0.090
JAN											
09...	14	4.3	.10	7.0	57	40	.08	0	--	<.010	.060
APR											
05...	17	1.9	<.10	7.0	46	37	.06	0	--	<.010	.140
JUL											
07...	15	2.3	.10	7.1	44	34	.06	0	--	<.010	.130

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT										
06...	0.22	0.31	0.020	0.010	0.01	<20	120	40	170	140
JAN										
09...	.46	.52	.020	<.010	.02	<20	160	60	430	400
APR										
05...	<.20	--	<.020	.010	--	<20	340	220	80	60
JUL										
07...	<.20	--	<.020	.010	--	<20	360	210	110	60

02464800 LAKE TUSCALOOSA NEAR TUSCALOOSA, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	77	77	77	83	83	83	88	88	88	90	89	89
2	78	77	78	83	82	83	88	88	88	90	89	89
3	78	78	78	---	---	---	88	87	88	90	89	89
4	78	77	78	84	83	84	88	88	88	90	89	90
5	78	77	77	84	83	84	88	88	88	90	89	89
6	77	77	77	84	83	84	88	88	88	90	89	89
7	77	77	77	84	83	84	88	88	88	90	89	90
8	78	77	78	84	84	84	88	88	88	90	89	90
9	78	78	78	84	84	84	88	88	88	91	90	90
10	78	78	78	85	84	84	88	88	88	91	91	91
11	78	78	78	85	84	84	88	88	88	91	91	91
12	78	78	78	85	84	85	88	87	88	92	91	91
13	78	78	78	85	84	85	88	87	88	92	90	91
14	79	78	79	85	84	85	88	87	88	93	92	92
15	79	79	79	85	85	85	88	87	88	92	92	92
16	79	79	79	85	85	85	88	87	88	94	92	93
17	79	79	79	86	85	85	88	87	87	93	93	93
18	79	79	79	86	85	85	87	87	87	93	93	93
19	81	79	79	86	86	86	87	87	87	93	93	93
20	81	80	80	86	85	86	87	87	87	93	93	93
21	80	80	80	86	86	86	88	87	87	93	92	93
22	81	80	80	87	86	87	88	87	88	93	92	93
23	81	80	80	87	87	87	88	87	87	93	92	93
24	81	80	80	87	87	87	89	87	88	92	91	91
25	82	80	81	87	87	87	88	88	88	92	91	91
26	82	81	82	88	86	87	89	88	88	92	91	91
27	82	82	82	87	86	87	90	88	89	91	89	90
28	82	81	82	88	87	87	90	89	90	90	89	89
29	82	81	81	88	87	88	90	89	89	89	89	89
30	82	82	82	89	88	88	90	89	89	89	86	88
31	83	82	82	---	---	---	89	89	89	89	86	88
MONTH	83	77	79	---	---	---	90	87	88	94	86	91

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	91	87	90	68	67	68	---	---	---	---	---	---
2	90	87	89	68	67	67	---	---	---	---	---	---
3	---	---	---	69	67	68	---	---	---	---	---	---
4	86	85	86	69	68	68	---	---	---	67	65	66
5	86	85	85	69	66	68	---	---	---	66	64	65
6	86	84	85	68	67	67	60	59	59	68	65	65
7	85	84	84	67	67	67	60	58	59	66	65	66
8	85	84	84	68	67	68	60	59	59	68	65	66
9	84	83	84	68	68	68	61	59	60	66	64	65
10	83	81	82	68	68	68	61	60	60	66	65	65
11	82	81	82	68	68	68	62	60	61	66	65	66
12	82	81	81	68	68	68	63	60	61	66	65	65
13	82	80	81	68	68	68	64	61	61	66	65	65
14	80	77	79	---	---	---	64	61	62	69	65	65
15	78	77	77	---	---	---	64	61	62	65	64	65
16	78	77	78	---	---	---	65	63	64	69	64	65
17	77	77	77	---	---	---	65	61	63	71	65	66
18	77	75	76	---	---	---	63	61	62	69	65	66
19	76	75	76	---	---	---	63	62	62	66	65	65
20	76	72	74	---	---	---	64	62	62	67	65	66
21	74	72	74	---	---	---	64	60	62	67	65	66
22	74	73	74	---	---	---	64	61	63	67	65	66
23	73	71	72	---	---	---	65	61	63	67	65	66
24	72	70	71	---	---	---	63	62	62	66	65	66
25	71	70	71	---	---	---	65	62	63	66	65	66
26	71	70	71	---	---	---	65	62	64	67	65	66
27	71	69	70	---	---	---	---	---	---	68	65	66
28	69	68	68	---	---	---	---	---	---	68	65	66
29	---	---	---	---	---	---	---	---	---	66	65	65
30	---	---	---	---	---	---	---	---	---	66	65	66
31	---	---	---	---	---	---	---	---	---	67	65	66
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

02464800 LAKE TUSCALOOSA NEAR TUSCALOOSA, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	66	65	66	---	---	---	68	64	65	63	57	59
2	66	65	65	---	---	---	66	64	65	67	57	60
3	68	65	66	---	---	---	69	63	65	61	57	58
4	67	65	66	---	---	---	70	62	65	63	58	61
5	67	65	66	---	---	---	70	63	64	63	59	61
6	68	65	67	---	---	---	68	60	64	60	57	58
7	69	65	67	---	---	---	67	61	64	63	57	59
8	66	65	66	65	63	64	73	58	62	67	57	62
9	68	65	66	65	63	64	65	62	63	64	62	64
10	68	65	67	68	63	64	64	61	63	72	62	64
11	66	65	66	66	64	65	64	61	62	73	62	64
12	67	65	66	69	64	65	64	60	62	69	62	64
13	67	65	66	67	63	65	66	60	61	68	62	64
14	67	55	66	69	64	65	66	61	62	73	62	65
15	67	65	66	65	64	65	63	60	62	71	59	62
16	75	65	69	66	64	65	66	60	62	69	59	61
17	79	70	75	68	64	65	64	61	62	60	59	60
18	79	71	75	68	64	65	63	59	61	61	59	60
19	78	71	75	67	63	65	69	59	62	63	59	60
20	78	76	77	65	64	64	63	60	61	62	59	60
21	77	75	77	66	64	65	63	59	61	61	59	60
22	77	74	76	66	64	65	67	59	62	61	59	60
23	78	76	77	66	64	65	62	58	60	61	59	60
24	77	67	74	66	64	65	65	59	60	60	59	60
25	74	65	71	67	64	65	67	58	60	60	59	60
26	69	63	66	68	64	65	63	56	59	60	59	60
27	---	---	---	66	63	65	62	58	60	61	60	60
28	---	---	---	66	64	65	62	59	60	61	60	60
29	---	---	---	70	63	65	61	58	59	61	59	60
30	---	---	---	68	64	65	62	58	59	64	60	61
31	---	---	---	69	64	66	63	57	60	---	---	---
MONTH	---	---	---	---	---	---	73	56	62	73	57	61

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	25.4	25.0	25.2	19.8	19.1	19.4	14.6	14.2	14.4	11.2	11.0	11.1
2	25.0	24.8	24.9	19.3	19.0	19.2	14.2	13.9	14.1	11.5	11.0	11.0
3	24.9	24.5	24.7	---	---	---	13.9	13.7	13.8	11.3	10.9	11.1
4	24.5	23.9	24.1	18.3	18.1	18.2	13.9	13.5	13.7	11.3	11.0	11.2
5	23.9	23.3	23.6	18.4	18.0	18.2	13.8	13.4	13.6	11.1	10.8	11.0
6	23.4	22.8	23.1	18.2	17.8	17.9	13.5	13.2	13.3	11.0	10.8	10.9
7	23.1	22.7	22.8	17.8	17.4	17.6	13.2	13.1	13.2	11.2	10.9	11.0
8	22.7	22.3	22.5	17.6	17.4	17.5	13.6	13.0	13.2	11.4	10.9	11.3
9	22.4	22.0	22.1	17.6	17.3	17.5	13.2	13.0	13.1	11.3	11.0	11.1
10	22.4	21.8	22.0	17.7	17.3	17.4	13.0	12.8	12.9	11.2	10.9	11.1
11	22.4	21.8	21.9	17.5	17.2	17.3	12.8	12.4	12.6	11.2	11.0	11.0
12	22.0	21.6	21.8	17.2	17.0	17.1	12.5	12.2	12.3	11.4	10.9	11.0
13	21.8	21.3	21.5	17.1	16.9	17.0	12.4	12.0	12.2	11.3	11.0	11.2
14	21.4	20.9	21.1	17.0	16.8	16.9	12.1	11.9	12.0	11.1	10.9	11.0
15	20.9	20.6	20.7	16.9	16.7	16.8	12.1	11.9	12.0	11.1	10.9	11.0
16	20.7	20.4	20.6	17.0	16.6	16.8	11.9	11.7	11.8	11.3	10.7	11.0
17	20.7	20.5	20.6	16.9	16.5	16.7	11.7	11.4	11.6	11.4	10.7	10.8
18	21.6	20.5	20.7	16.5	16.2	16.4	11.4	11.2	11.3	10.8	10.6	10.7
19	21.4	20.8	21.0	16.2	16.1	16.2	11.2	11.0	11.1	10.8	10.6	10.6
20	20.8	20.4	20.6	16.7	16.2	16.4	11.0	10.9	10.9	10.9	10.6	10.7
21	20.5	20.2	20.4	16.2	15.8	16.1	11.3	11.1	11.1	11.0	10.5	10.6
22	20.7	20.1	20.3	16.0	15.7	15.8	11.3	11.0	11.1	10.8	10.5	10.6
23	20.3	19.9	20.1	16.1	15.7	15.8	11.6	11.0	11.3	10.6	10.4	10.5
24	20.3	19.8	20.0	15.8	15.5	15.6	12.0	11.1	11.4	10.8	10.4	10.5
25	19.9	19.5	19.7	15.4	15.2	15.3	11.8	11.4	11.5	10.6	10.4	10.5
26	19.6	19.4	19.5	15.4	15.1	15.2	11.5	11.3	11.3	10.6	10.4	10.5
27	19.5	19.3	19.4	15.5	15.3	15.4	11.4	10.9	11.1	11.4	10.6	11.0
28	19.9	19.3	19.5	15.3	15.0	15.2	11.4	10.7	11.0	11.1	10.7	10.8
29	20.0	19.4	19.7	15.0	14.5	14.8	11.4	10.9	11.1	10.7	10.6	10.7
30	20.1	19.5	19.6	14.7	14.4	14.5	11.1	10.9	11.0	12.5	10.8	11.3
31	19.5	19.2	19.3	---	---	---	11.1	10.9	11.0	12.0	10.7	11.1
MONTH	25.4	19.2	21.4	---	---	---	14.6	10.7	12.1	12.5	10.4	10.9

02464800 LAKE TUSCALOOSA NEAR TUSCALOOSA, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.1	10.4	10.6	9.9	9.7	9.8	---	---	---	---	---	---
2	11.3	10.5	10.8	9.8	9.6	9.7	---	---	---	---	---	---
3	---	---	---	9.8	9.6	9.6	---	---	---	---	---	---
4	11.4	11.2	11.3	9.6	9.6	9.6	---	---	---	19.9	14.1	15.7
5	11.3	11.0	11.1	10.5	9.4	9.7	---	---	---	20.7	14.6	16.3
6	11.0	10.7	10.9	10.3	9.8	9.9	15.6	15.2	15.4	21.1	15.3	18.8
7	10.7	10.4	10.6	9.9	9.6	9.8	16.6	15.4	15.8	21.0	18.0	20.0
8	10.6	10.3	10.4	10.5	9.4	9.9	16.0	14.9	15.7	19.8	14.8	17.4
9	10.5	10.1	10.3	10.8	9.7	10.2	15.8	15.5	15.6	20.6	14.1	16.6
10	10.6	10.0	10.3	10.3	9.9	10.0	15.5	15.1	15.3	21.0	19.8	20.6
11	10.5	10.0	10.1	10.1	9.6	9.8	15.9	14.8	15.2	21.4	20.2	20.7
12	10.3	10.0	10.1	9.9	9.6	9.8	15.1	14.9	15.0	20.8	20.1	20.4
13	10.0	9.9	10.0	9.9	9.6	9.8	16.8	14.8	15.3	20.7	20.0	20.3
14	9.9	9.8	9.9	---	---	---	16.4	15.1	15.6	20.5	16.7	19.2
15	10.2	9.9	10.0	---	---	---	19.4	14.9	15.6	20.3	18.7	19.9
16	11.6	10.2	11.2	---	---	---	18.9	17.6	18.1	20.2	18.3	19.5
17	11.6	11.1	11.3	---	---	---	17.6	15.3	16.4	19.8	16.0	18.5
18	11.1	10.8	10.9	---	---	---	15.8	14.7	15.3	18.6	15.1	17.3
19	10.8	10.6	10.7	---	---	---	16.2	14.9	15.4	18.3	14.2	16.0
20	10.6	9.8	10.0	---	---	---	18.3	15.0	16.1	15.9	13.9	14.6
21	11.1	9.8	10.4	---	---	---	17.1	15.0	16.2	16.0	14.4	15.0
22	10.8	10.2	10.5	---	---	---	17.5	15.0	16.1	15.6	14.4	15.0
23	10.1	9.6	9.9	---	---	---	17.1	15.2	15.9	16.5	14.5	15.5
24	10.1	9.5	9.8	---	---	---	18.0	15.2	16.1	16.2	14.5	15.3
25	9.7	9.5	9.6	---	---	---	19.2	15.6	17.1	16.2	13.9	15.0
26	9.6	9.4	9.5	---	---	---	24.0	16.9	21.2	16.8	14.8	15.6
27	9.6	9.4	9.5	---	---	---	---	---	---	17.5	15.1	16.3
28	10.7	9.4	9.9	---	---	---	---	---	---	16.9	15.4	16.1
29	---	---	---	---	---	---	---	---	---	17.1	15.7	16.2
30	---	---	---	---	---	---	---	---	---	16.2	14.9	15.6
31	---	---	---	---	---	---	---	---	---	16.3	15.4	16.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.2	16.0	16.6	---	---	---	21.8	20.9	21.4	26.2	22.2	23.4
2	19.2	16.4	17.2	---	---	---	21.7	21.1	21.4	25.5	22.2	23.7
3	18.4	16.0	16.9	---	---	---	22.2	21.1	21.6	25.6	23.7	24.4
4	17.7	16.0	16.7	---	---	---	21.9	21.1	21.5	24.2	21.7	22.8
5	18.0	16.4	17.1	---	---	---	21.9	21.2	21.5	23.7	22.1	22.9
6	18.3	16.0	17.3	---	---	---	23.6	21.0	21.7	24.4	22.6	23.4
7	17.6	16.1	16.9	---	---	---	22.9	20.8	21.9	24.7	23.0	23.8
8	17.1	16.0	16.5	21.3	20.4	20.6	23.3	22.1	22.6	24.6	22.6	23.7
9	18.8	15.7	17.1	21.5	20.0	20.7	23.2	21.2	21.8	24.2	22.8	23.4
10	17.7	16.5	17.1	21.4	19.6	20.7	22.2	21.3	21.6	26.3	23.4	24.7
11	18.1	15.5	16.6	21.8	20.3	20.9	22.4	21.5	21.9	25.7	23.1	24.4
12	16.9	15.3	15.9	21.5	20.4	21.0	22.1	21.5	21.8	26.3	23.5	24.6
13	17.7	16.0	16.8	21.3	19.8	20.8	22.6	21.5	21.9	26.1	23.5	24.6
14	17.2	15.2	16.2	21.0	20.2	20.7	23.0	21.3	21.8	26.6	23.9	24.8
15	16.7	15.2	15.8	21.3	20.4	20.9	22.8	21.4	21.8	28.6	24.9	27.6
16	18.3	16.2	17.3	22.2	20.4	20.9	23.1	21.5	21.9	27.9	25.5	27.5
17	19.5	17.6	18.8	21.3	20.7	21.0	22.3	21.3	22.0	27.6	26.8	27.2
18	19.6	17.8	18.7	21.3	20.3	21.0	22.9	21.4	22.2	27.4	26.3	26.9
19	19.5	17.7	18.6	22.5	20.2	20.9	22.7	21.5	22.0	26.6	25.1	26.2
20	19.7	18.7	19.3	21.6	20.7	21.2	22.5	21.6	21.9	26.3	25.5	26.0
21	20.2	19.3	19.6	21.4	20.6	21.0	22.8	21.5	22.0	26.6	25.7	26.2
22	20.1	19.7	19.9	21.2	20.6	21.0	22.7	21.4	22.1	26.7	25.2	26.1
23	20.2	19.3	19.7	21.4	20.9	21.1	23.2	21.6	22.3	26.2	25.3	26.0
24	19.7	16.9	18.3	21.4	20.6	21.0	23.2	21.9	22.4	25.2	24.5	24.8
25	19.9	16.5	18.3	21.5	20.9	21.2	23.3	21.8	22.7	24.5	23.7	24.1
26	20.1	19.3	19.6	21.6	21.0	21.2	24.1	21.5	22.7	24.3	23.4	23.6
27	---	---	---	21.9	21.1	21.4	23.9	21.3	22.7	23.7	23.2	23.3
28	---	---	---	21.6	21.1	21.3	23.3	22.2	22.8	23.2	22.6	22.9
29	---	---	---	22.1	21.0	21.4	23.7	22.2	22.9	22.6	22.3	22.4
30	---	---	---	21.6	21.2	21.3	23.7	22.4	23.1	22.4	21.6	22.1
31	---	---	---	21.8	20.9	21.4	24.2	22.5	23.3	---	---	---
MONTH	---	---	---	---	---	---	31.6	20.8	22.2	28.6	21.6	24.6

02465000 BLACK WARRIOR RIVER AT NORTHPORT, AL

LOCATION.--Lat 33°12'51", long 87°34'50", in NE¼ sec. 21, T. 21 S., R. 10 W., Tuscaloosa County, Hydrologic Unit 03160112, attached to loading dock at Alabama State Dock Facility, at Northport, 0.2 mi downstream from Illinois Central Gulf Railroad bridge, 0.35 mi upstream from Oliver Lock and Dam, 0.9 mi downstream from Two Mile Creek, 5.2 mi downstream from North River, and at mile 126.6.

DRAINAGE AREA.--4,820 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1889 to September 1894 (gage heights only), October 1894 to December 1902, January 1903 to December 1905 (gage heights and discharge measurements only), August 1928 to current year. Monthly discharge only for period October to December 1894, published in WSP 1304.

REVISED RECORDS.--WSP 1002: 1940-43. WSP 1624: 1900. WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 83.35 ft above National Geodetic Vertical Datum of 1929. See WSP 2106 for history of changes prior to Mar. 19, 1951. Mar. 20, 1951 to Feb. 13, 1974, water-stage recorder 0.35 mi upstream on pier of former bridge at present datum. Feb. 14, 1974, to Aug. 7, 1974, nonrecording gage at site 0.35 mi downstream at datum 1.08 ft lower. Subsequent to Apr. 19, 1944, auxiliary water-stage recorder, and Aug. 29, 1939, to Apr. 18, 1944, auxiliary nonrecording gage, 500 ft downstream from Oliver lock and dam at datum 1.08 ft lower.

REMARKS.--No estimated daily discharge. Water-discharge records good except those below 6,000 ft^3/s, which are poor. Some regulation by Lewis Smith Reservoir on Sipsey Fork (station 02451950), by Bankhead Lock and Dam on Black Warrior River, usable capacity, 112,000 acre-ft, Holt Lock and Dam on Black Warrior River, usable capacity 115,000 acre-ft, and occasionally during periods of low flow by Oliver Lock and Dam downstream from gage. National Weather Service rain gage and gage height telemeters at station.

AVERAGE DISCHARGE.--69 years (water years 1895-1902, 1929-89) 7,942 ft^3/s, 22.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 272,000 ft^3/s, Apr. 13, 1979; maximum gage height, 67.7 ft, Apr. 18, 1900; minimum daily discharge, 20 ft^3/s, Oct. 16, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 94,600 ft^3/s, July 2, gage height, 51.35 ft; minimum daily, 238 ft^3/s, Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6430	880	11000	31000	10900	61000	15800	4840	2480	6910	4760	2790
2	13200	409	10900	22100	11200	43300	13600	1810	3360	53400	3240	1110
3	10600	1020	10600	17700	10800	30500	13800	1680	809	61600	2960	238
4	8300	2660	10500	22700	10700	31400	21500	5970	503	46000	3370	2760
5	8120	12600	4900	13100	10900	43700	54600	4990	5000	33500	4110	3020
6	5530	7950	2100	13000	23700	52200	39300	14800	5550	24400	2550	2470
7	4730	6820	3740	11800	26400	40400	25200	12700	5270	17800	3560	2280
8	772	5270	3220	11300	25000	29200	23500	8610	4760	16300	3020	1860
9	378	5450	2700	14900	19700	24600	20100	6890	7370	15000	2100	2780
10	3720	6460	2180	24200	11900	23000	19800	7140	5200	13700	3310	2680
11	4860	6450	7190	36100	12700	20800	16200	6040	5180	16200	2900	3730
12	6280	5200	6290	49700	11400	20600	14700	4290	8560	16000	577	5330
13	5370	4730	4950	74900	10900	20200	12100	4020	7620	16400	387	4870
14	4850	1120	5380	69500	10900	17100	10500	3010	8580	19300	4690	2840
15	2150	2000	4470	54400	9610	17000	9480	4710	27900	17000	3460	3230
16	359	4730	5720	35100	10600	13600	8020	3890	35700	13400	3220	523
17	409	3800	4940	26200	10600	11200	6220	4670	27800	16300	2860	918
18	584	1560	4140	20900	9020	11300	9500	4460	15400	17600	2620	3520
19	368	2510	5440	18700	8720	11000	7340	4890	19000	14500	692	2470
20	1370	19400	4930	14700	8570	11700	6280	2540	32000	12500	1540	2110
21	632	16800	4360	15200	24500	19000	4830	1770	28200	12100	2390	3040
22	472	11600	4200	12800	30900	18100	4640	4390	30800	10800	2330	3080
23	393	10900	7700	11500	19000	18200	1380	4230	31800	8940	2860	6500
24	621	8890	8160	10700	14100	20700	4510	3020	23300	5440	3130	5760
25	488	7330	7790	10600	13000	16700	4560	3810	16300	6760	1910	4160
26	566	6660	6310	8070	12300	12700	3120	2160	16300	5900	1240	7230
27	1060	27900	7710	8130	12500	11600	2630	650	12700	6160	1380	3880
28	5010	23000	8040	9200	63000	11600	1050	472	10500	5780	2140	3080
29	623	15200	7810	8840	---	12800	556	626	10700	4140	4150	14000
30	497	11400	7930	11200	---	33500	2010	2880	7800	741	3120	12600
31	1810	---	15900	11500	---	21300	---	1830	---	4670	2350	---
TOTAL	100552	240699	201200	699740	453520	730000	376826	137788	416442	519241	82926	114859
MEAN	3244	8023	6490	22570	16200	23550	12560	4445	13880	16750	2675	3829
MAX	13200	27900	15900	74900	63000	61000	54600	14800	35700	61600	4760	14000
MIN	359	409	2100	8070	8570	11000	556	472	503	741	387	238
CFSM	.67	1.66	1.35	4.68	3.36	4.89	2.61	.92	2.88	3.48	.55	.79
IN.	.78	1.86	1.55	5.40	3.50	5.63	2.91	1.06	3.21	4.01	.64	.89

CAL YR 1988 TOTAL 1650603 MEAN 4510 MAX 35300 MIN 165 CFSM .94 IN. 12.74
WTR YR 1989 TOTAL 4073793 MEAN 11160 MAX 74900 MIN 238 CFSM 2.32 IN. 31.44

02465000 BLACK WARRIOR RIVER AT NORTHPORT, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SUSPENDED SEDIMENT: October 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV					
28...	0935	16.0	22400	14	847
28...	0945	32.0	22400	12	726
28...	0950	48.0	22400	10	605
28...	1000	64.0	22400	9	544
28...	1010	80.0	22400	47	2840
JAN					
12...	0900	16.0	46300	29	3630
12...	0910	32.0	46300	30	3750
12...	0920	48.0	46300	32	4000
12...	0930	64.0	46300	33	4130
12...	0940	80.0	46300	23	2880
12...	1000	25.0	--	--	--
12...	1015	50.0	--	--	--
12...	1030	75.0	--	--	--
12...	1530	80.0	50800	35	4800
12...	1540	64.0	50800	59	7080
12...	1550	48.0	50800	48	6580
12...	1555	32.0	50800	53	7270
12...	1600	16.0	50800	61	8370
13...	0840	16.0	78800	153	32600
13...	0855	32.0	78800	139	29600
13...	0905	48.0	78800	149	31700
13...	0915	64.0	78800	176	37400
13...	0925	80.0	78800	160	34000
13...	1335	16.0	80200	110	23800
13...	1350	32.0	80200	115	24900
13...	1400	48.0	80200	117	25300
13...	1405	64.0	80200	128	27700
13...	1415	80.0	80200	112	24300
14...	0840	16.0	67700	74	13500
14...	0850	32.0	67700	78	14300
14...	0900	48.0	67700	75	13700
14...	0905	64.0	67700	76	13900
14...	0915	80.0	67700	65	11900
15...	1250	16.0	57200	63	9730
15...	1300	32.0	57200	66	10200
15...	1305	48.0	57200	63	9730
15...	1315	64.0	57200	62	9580
15...	1325	80.0	57200	59	9110
16...	0855	16.0	28900	70	5460
16...	0905	32.0	28900	64	4990
16...	0915	48.0	28900	56	4370
16...	0925	64.0	28900	51	3980
16...	0935	80.0	28900	51	3980
17...	0845	16.0	27200	66	4850
17...	0855	32.0	27200	66	4850
17...	0856	48.0	27200	63	4630
17...	0905	64.0	27200	60	4410
17...	0915	80.0	27200	62	4550
18...	1125	16.0	19200	45	2330
18...	1135	32.0	19200	45	2330
18...	1145	48.0	19200	43	2230
18...	1150	64.0	19200	46	2380
18...	1200	80.0	19200	40	2080
19...	0930	25.0	--	--	--
19...	0945	50.0	--	--	--
19...	1000	75.0	--	--	--
MAR					
05...	0855	16.0	42400	146	16700
05...	0905	32.0	42400	129	14800
05...	0910	48.0	42400	697	79800
05...	0915	64.0	42400	100	11400
05...	0920	80.0	42400	92	10500

02465000 BLACK WARRIOR RIVER AT NORTHPORT, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
APR					
05...	1000	16.0	55500	45	6740
05...	1005	32.0	55500	36	5390
05...	1415	16.0	55500	34	5090
05...	1420	32.0	55500	32	4800
05...	1435	64.0	55500	42	6290
05...	1445	80.0	55500	23	3450
JUL					
03...	0925	16.0	70000	39	7370
03...	0935	32.0	70000	40	7560
03...	0945	48.0	70000	40	7560
03...	0955	64.0	70000	40	7560
03...	1005	80.0	70000	37	6990
SEP					
29...	1025	16.0	31000	131	11000
29...	1030	32.0	31000	124	10400
29...	1040	48.0	31000	124	10400
29...	1045	64.0	31000	117	9790
29...	1050	80.0	31000	104	8700

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JAN										
12...	1000	17	23	32	57	68	73	80	90	98
12...	1015	10	19	41	80	89	92	96	98	100
12...	1030	18	25	36	39	41	44	47	50	57
19...	0930	0	0	5	59	84	89	96	100	100
19...	0945	0	0	6	63	83	88	93	97	100
19...	1000	1	1	15	88	96	98	99	99	100

02465005 BLACK WARRIOR RIVER BELOW OLIVER LOCK AND DAM, AT TUSCALOOSA, AL

LOCATION.--Lat 33°12'33", long 87°35'18", in NW¼ sec. 21, T. 21 S., R. 10 W., Tuscaloosa County, Hydrologic Unit 03160112, on downstream side of lock at Tuscaloosa, 0.7 mi upstream from Mill Creek, 0.7 mi downstream from Illinois Central Gulf Railroad bridge, and at mile 126.1.

DRAINAGE AREA.--4,821 mi².

PERIOD OF RECORD.--August 1939 to current year (gage heights only). October 1971 to current year in reports of Geological Survey. August 1939 to September 1971 in files of U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 82.3 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 19, 1944, nonrecording gage at same site and datum.

EXTREMES (0700) FOR PERIOD OF RECORD.--Maximum gage height, 66.7 ft, Feb. 22, 1961; minimum gage height, 10.0 ft, many days in October and November 1953, September 1954, and 1955.

EXTREMES (0700) FOR CURRENT YEAR.--Maximum gage height, 47.78 ft, Jan. 14; minimum, 12.70 ft, Nov. 4.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.45	13.51	19.99	29.84	20.29	45.51	26.25	14.80	13.67	16.70	15.01	13.64
2	18.98	12.76	19.56	30.15	20.07	43.11	22.69	14.08	14.08	21.10	14.71	13.78
3	19.95	12.82	19.40	25.67	20.14	36.09	22.20	14.03	14.24	47.21	14.38	13.44
4	16.92	12.70	19.26	25.03	19.88	32.36	22.11	13.79	13.31	42.99	14.22	13.37
5	16.27	17.85	19.29	24.06	19.79	40.40	39.10	15.74	13.60	39.55	14.64	13.96
6	14.88	16.78	13.64	22.24	20.29	42.32	40.02	18.97	14.97	33.31	14.22	13.83
7	14.58	15.07	14.44	20.60	28.80	40.70	34.83	22.03	15.57	29.40	14.37	13.81
8	13.83	15.07	14.03	20.07	28.24	34.97	30.26	18.11	14.57	25.80	14.16	13.67
9	12.81	14.15	13.93	19.96	27.25	32.97	27.15	16.52	14.84	23.44	14.64	13.57
10	12.96	14.39	13.52	24.87	23.21	28.09	26.77	15.80	15.70	23.24	13.74	13.92
11	13.26	14.91	14.15	28.37	21.48	28.14	25.12	16.21	14.93	24.07	14.27	14.49
12	13.92	14.84	15.72	37.86	20.80	26.23	23.32	14.97	16.42	24.50	13.88	14.09
13	14.45	14.41	15.04	45.86	20.33	26.39	22.49	14.48	16.48	23.22	13.33	15.41
14	14.15	14.29	14.70	47.78	19.94	25.48	20.73	14.68	16.00	26.40	13.38	13.89
15	13.69	12.90	14.79	46.15	19.29	25.10	19.07	14.28	22.67	24.83	14.70	14.05
16	12.87	13.30	14.32	39.55	19.73	23.53	18.88	14.93	34.56	22.37	14.06	13.79
17	12.75	14.97	14.49	35.36	19.76	21.16	15.90	14.50	32.34	21.49	14.04	13.36
18	12.81	14.31	14.23	30.73	17.83	20.52	18.06	14.66	26.72	25.93	14.15	13.53
19	12.75	13.55	14.05	26.67	17.53	20.35	16.92	15.49	24.04	23.98	13.86	13.97
20	12.74	16.18	14.54	25.49	17.19	20.68	16.00	14.48	31.50	22.55	13.27	13.75
21	13.15	24.83	14.16	21.79	21.69	21.08	15.29	13.95	29.24	20.64	13.69	13.61
22	12.94	21.62	13.91	22.56	31.48	25.37	14.85	13.76	34.05	20.25	13.96	14.18
23	13.01	19.99	14.63	20.96	28.19	24.59	14.96	14.86	32.68	18.65	13.71	13.75
24	13.04	17.56	17.12	20.47	23.71	27.35	13.61	14.50	29.82	15.83	14.01	15.18
25	12.94	16.23	16.75	19.95	21.84	24.79	14.77	14.18	26.98	16.45	13.90	15.13
26	13.01	15.22	16.30	17.41	20.98	22.95	14.49	14.46	24.09	15.49	13.58	15.50
27	12.95	28.13	17.04	17.00	21.00	21.44	14.09	13.60	22.43	16.07	13.78	14.93
28	13.31	28.79	15.91	17.93	38.16	20.62	13.80	13.55	20.33	15.18	13.67	14.20
29	13.78	25.49	16.12	17.72	---	20.56	13.53	13.74	19.66	15.57	13.77	27.27
30	12.94	21.14	15.92	19.82	---	30.07	13.60	13.91	17.40	14.28	14.44	21.91
31	12.83	---	19.35	20.44	---	30.30	---	14.06	---	13.74	13.99	---
MEAN	14.00	16.93	15.82	26.53	22.46	28.49	21.03	15.07	21.23	23.36	14.05	14.77
MAX	19.95	28.79	19.99	47.78	38.16	45.51	40.02	22.03	34.56	47.21	15.01	27.27
MIN	12.74	12.70	13.52	17.00	17.19	20.35	13.53	13.55	13.31	13.74	13.27	13.36

CAL YR 1988 MEAN 15.06 MAX 32.37 MIN 12.70
WTR YR 1989 MEAN 19.46 MAX 47.78 MIN 12.70

02465493 ELLIOTTS CREEK AT MOUNDVILLE, AL

LOCATION.--Lat 32°59'50", long 87°37'20", in W½ sec. 6, T. 23 N., R. 5 E., Hale County, Hydrologic Unit 03160113, on downstream side of bridge on State Highway 69 at Moundville, 2.5 mi upstream from Southern Railway bridge, and 6.6 mi upstream from mouth.

DRAINAGE AREA.--32.3 mi^2.

PERIOD OF RECORD.--October 1976 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 147.81 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 21 to Nov. 28. Records good except those for period of estimated record, which are fair. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--13 years, 40.8 ft^3/s, 17.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft^3/s, Apr. 13, 1979, gage height, 7.40 ft; minimum discharge, 5.1 ft^3/s, Aug. 31, 1988.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 4	1930	*522	*6.31				

Minimum discharge, 8.5 ft^3/s, Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	e13	27	123	26	55	59	28	10	21	13	9.7
2	61	e12	24	80	25	45	46	29	10	66	13	9.4
3	50	e11	22	55	25	39	40	21	11	122	13	9.2
4	22	e14	22	51	26	170	50	24	16	100	13	11
5	14	e45	21	41	28	157	96	43	23	63	13	9.8
6	12	e30	21	34	31	155	67	52	39	74	12	8.9
7	11	e23	20	32	49	106	47	29	33	43	11	9.0
8	10	e18	20	31	41	68	44	19	26	33	12	9.0
9	10	e16	20	39	30	55	87	18	30	37	12	9.1
10	10	e14	20	54	27	47	112	18	29	84	11	9.2
11	10	e13	21	55	25	41	86	17	27	81	11	29
12	10	e13	21	59	25	38	60	15	45	67	11	44
13	9.8	e38	20	88	24	35	49	14	44	51	11	27
14	9.7	e28	20	83	24	33	43	23	30	51	11	16
15	10	e20	20	79	24	32	42	42	71	41	12	14
16	10	e16	22	65	23	30	41	33	91	29	12	13
17	10	e14	21	48	22	29	36	19	60	24	13	12
18	11	e13	20	40	23	28	32	16	33	22	12	12
19	12	e20	19	38	23	27	30	20	24	19	11	11
20	13	e50	19	44	24	28	28	18	22	18	11	11
21	e18	e35	19	44	53	65	26	21	20	17	10	10
22	e16	e21	19	34	54	84	25	17	33	16	10	11
23	e12	e17	55	31	34	78	23	38	66	17	9.8	11
24	e14	e15	62	29	28	69	22	59	46	30	9.5	11
25	e12	e14	42	28	26	51	20	39	30	39	9.4	17
26	e11	e21	28	27	25	41	19	20	24	26	9.2	22
27	e11	e90	25	28	26	36	17	15	20	22	9.4	19
28	e15	e65	26	26	46	33	16	13	17	25	13	57
29	e23	40	28	25	---	48	15	12	18	17	11	168
30	e17	29	39	26	---	118	15	11	17	15	10	94
31	e15	---	114	27	---	115	---	11	---	13	10	---
TOTAL	493.5	768	877	1464	837	1956	1293	754	965	1283	349.3	703.3
MEAN	15.9	25.6	28.3	47.2	29.9	63.1	43.1	24.3	32.2	41.4	11.3	23.4
MAX	61	90	114	123	54	170	112	59	91	122	13	168
MIN	9.7	11	19	25	22	27	15	11	10	13	9.2	8.9
CFSM	.49	.79	.88	1.46	.93	1.95	1.33	.75	1.00	1.28	.35	.73
IN.	.57	.88	1.01	1.69	.96	2.25	1.49	.87	1.11	1.48	.40	.81

CAL YR 1988 TOTAL 6505.7 MEAN 17.8 MAX 114 MIN 5.8 CFSM .55 IN. 7.49
WTR YR 1989 TOTAL 11743.1 MEAN 32.2 MAX 170 MIN 8.9 CFSM 1.00 IN. 13.52

e Estimated

02466030 BLACK WARRIOR RIVER AT SELDEN LOCK AND DAM, NEAR EUTAW, AL

LOCATION.--Lat 32°46'40", long 87°50'26", in SE¼ sec. 24, T. 21 N., R. 2 E., Hale County, Hydrologic Unit 03160113, on left bank at dam, 1.2 mi upstream from White Creek, 5.0 mi southeast of Eutaw, and at mile 49.6.

DRAINAGE AREA.--5,810 mi^2.

PERIOD OF RECORD.--October 1976 to current year. Prior to October 1984, published as Black Warrior River at Warrior Lock and Dam, near Eutaw.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 50.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records fair. Some regulation by Lewis Smith Reservoir on Sipsey Fork (station 02451950), by Bankhead Lock and Dam on Black Warrior River, usable capacity, 112,000 acre-ft, Holt Lock and Dam on Black Warrior River, usable capacity, 115,000 acre-ft, and lock and dam at gage.

AVERAGE DISCHARGE.--13 years, 9,319 ft^3/s, 21.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 222,000 ft^3/s, Apr. 16, 1979; maximum gage height, 58.87 ft, Apr. 16, 1979; minimum daily discharge, 317 ft^3/s, Sept. 24, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 75,000 ft^3/s, Jan. 16; maximum gage height, 48.17 ft, Jan. 16; minimum daily, 532 ft^3/s, Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7410	2790	13600	24100	12100	38600	25300	5810	1720	10100	7300	3610
2	10400	1060	12900	28700	12100	54000	19200	4210	4660	18100	6020	2480
3	12600	1500	12600	22400	11500	53600	16400	3230	4930	35900	5820	1260
4	11300	962	12600	19900	11100	40900	15900	4160	869	48500	5590	982
5	8960	8360	10800	20700	11600	31100	29500	7140	3020	62900	6030	4620
6	6660	18800	3630	15100	13800	47100	38300	10600	6950	50200	4580	4090
7	5940	22900	3810	13500	23300	56200	37200	14700	7770	33200	5460	2590
8	3910	22100	5630	12200	25500	45700	32500	10900	7100	25600	4790	3310
9	532	18900	6220	12300	24400	34100	28300	7900	6890	20300	5770	2160
10	2840	5920	3730	18400	18600	30100	25400	8440	8860	20400	3160	3840
11	3340	6990	6410	24600	13800	26000	22800	8010	7160	19300	5290	4830
12	5570	7220	9440	33400	13100	22100	18900	5810	8600	19400	3850	5060
13	6320	5810	7840	38400	11900	21500	17100	5370	9470	18600	1820	7860
14	5160	6430	6450	52500	11300	19500	13500	6270	9330	20500	2470	3950
15	4300	3120	6290	63900	11500	18000	12000	5920	17200	20500	5690	3970
16	1510	3240	5600	64300	11200	17500	10800	6510	28400	17600	3950	3110
17	934	6780	5760	50900	11100	12900	8670	5570	32000	15800	4270	791
18	858	5880	5910	40900	10600	12700	9490	6350	28200	18700	4790	1950
19	955	2710	5410	27700	9190	11600	10100	6450	19700	17600	3550	4680
20	860	10200	6330	22300	9960	12400	9080	5320	23200	15900	1160	3580
21	1740	21300	5610	17200	13800	14700	7010	4620	28300	13300	1440	2400
22	851	17900	4270	16800	25800	20900	6160	3030	29300	13200	4850	4750
23	884	13600	6510	14200	27700	20600	6330	7910	31200	11200	2150	4590
24	884	11800	9250	12700	20300	21700	2330	6640	32100	8870	4500	7100
25	907	10400	8340	11200	16100	20700	6110	6190	26200	9090	3790	6200
26	961	8590	7250	10300	14100	17900	4900	5680	19600	7700	1700	6740
27	846	17900	7810	9980	13100	14400	4460	2390	17200	8330	1700	6930
28	3450	26300	7250	9480	23800	14800	3360	908	13100	7020	3140	5100
29	3770	22500	9060	9510	---	14800	1370	1190	12200	7690	3160	17600
30	980	16500	7950	10800	---	22800	984	3200	11400	5000	5570	18500
31	948	---	12300	12100	---	30800	---	4090	---	2340	4060	---
TOTAL	116580	328462	236560	740470	432350	819700	443454	184518	456629	602840	127420	148633
MEAN	3761	10950	7631	23890	15440	26440	14780	5952	15220	19450	4110	4954
MAX	12600	26300	13600	64300	27700	56200	38300	14700	32100	62900	7300	18500
MIN	532	962	3630	9480	9190	11600	984	908	869	2340	1160	791
CFSM	.65	1.88	1.31	4.11	2.66	4.55	2.54	1.02	2.62	3.35	.71	.85
IN.	.75	2.10	1.51	4.74	2.77	5.25	2.84	1.18	2.92	3.86	.82	.95

CAL YR 1988 TOTAL 1878885 MEAN 5134 MAX 29300 MIN 499 CFSM .88 IN. 12.03
WTR YR 1989 TOTAL 4637616 MEAN 12710 MAX 64300 MIN 532 CFSM 2.19 IN. 29.69

02466031 BLACK WARRIOR RIVER BELOW SELDEN DAM NEAR EUTAW, AL
(National stream-quality accounting network station)

LOCATION.--Lat 32°46'44", long 87°50'39", in sec. 24, T. 21 N., R. 2 E., Hale County, Hydrologic Unit 03160113, 0.3 mi downstream from Warrior dam, 0.3 mi upstream from Jenny Watson Creek, and 4.6 mi southeast of Eutaw.

DRAINAGE AREA.--5,810 mi^2.

PERIOD OF RECORD.--February 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1978 to current year.
WATER TEMPERATURE: February 1978 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

REMARKS.--Interruptions in conductance and temperature data due to malfunctions of equipment.

COOPERATION.--Specific conductance and temperature data furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 312 microsiemens, Sept. 23, 1988; minimum daily, 72 microsiemens, Mar. 30, 1980.
WATER TEMPERATURE: Maximum daily, 36.0°C, Aug. 11, 1986, Aug. 1, 1988; minimum daily, 5.0°C, Feb. 25, 1978, Feb. 2, 1979, Jan. 19, 1982, and Feb. 2, 3, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 300 microsiemens, Oct. 24; minimum daily, 111 microsiemens, Mar. 9.
TEMPERATURE: Maximum daily, 31.0°C, Aug. 2, 3, 5, 25-27, 29-31, Sept. 1-3, 5, 6, 14; minimum daily, 10.0°C, Dec. 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
13...	1000	--	255	262	7.80	21.0	7.0	771	9.3	103	4	3
DEC												
09...	1110	--	130	204	7.40	13.0	7.0	767	11.4	107	230	9
MAR												
02...	1000	--	152	146	6.80	7.0	120	760	12.0	99	280	180
APR												
18...	1000	--	122	118	7.50	16.0	16	762	10.2	103	450	29
JUN												
07...	1615	--	220	209	7.60	27.0	3.2	755	--	--	K6	K4
AUG												
10...	1115	--	151	157	7.20	28.5	4.8	764	8.3	107	K3	K6
10...	1116	--	151	--	7.20	28.5	--	764	8.3	107	--	--
10...	1117	5.00	151	--	7.00	28.9	--	--	7.4	--	--	--
10...	1118	10.0	150	--	7.00	28.5	--	--	6.9	--	--	--
10...	1119	15.0	150	--	7.00	28.5	--	--	6.9	--	--	--
10...	1120	20.0	150	--	7.00	28.5	--	--	6.9	--	--	--
10...	1121	25.0	150	--	7.00	28.5	--	--	6.7	--	--	--

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	PH LAB (STAND ARD UNITS)
OCT												
13...	86	41	19	9.4	18	30	0.9	3.0	0	55	45	7.80
DEC												
09...	70	39	15	7.9	10	23	.5	2.5	0	37	31	7.50
MAR												
02...	52	33	11	6.0	6.3	20	.4	1.8	0	23	19	7.50
APR												
18...	42	24	9.0	4.8	4.8	19	.3	1.6	0	24	19	7.50
JUN												
07...	76	40	16	8.7	14	28	.7	2.0	0	45	37	8.30
AUG												
10...	50	25	11	5.5	7.0	22	.4	1.9	0	30	24	7.40

02466031 BLACK WARRIOR RIVER BELOW SELDEN DAM NEAR EUTAW, AL--Continued

DATE	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
OCT 13...	45	59	8.4	0.20	4.8	155	151	0.21	0	--	<.010
DEC 09...	31	53	5.6	.10	6.5	131	121	.18	0	0.440	.040
MAR 02...	19	35	3.8	.10	6.2	96	85	.13	0	.640	.010
APR 18...	18	27	3.4	.10	6.8	72	71	.10	0	.380	.010
JUN 07...	36	53	7.0	.10	1.5	126	126	.17	0	.360	.030
AUG 10...	25	32	5.9	.10	6.2	102	86	.14	0	--	<.010

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)
OCT 13...	0.350	0.010	0.010	0.49	0.50	0.040	0.030	0.030	0.04	0.0	10
DEC 09...	.480	.040	.030	.46	.50	.050	.030	.020	.05	.01	--
MAR 02...	.650	.100	.090	.60	.70	.190	.020	.020	.19	.0	40
APR 18...	.390	.090	.090	.21	.30	.050	.020	<.010	.05	.02	40
JUN 07...	.390	.140	.130	.76	.90	.020	<.010	.010	.02	--	--
AUG 10...	.340	.060	.050	.24	.30	.030	<.010	<.010	.03	--	20

DATE	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 13...	3	29	<.5	<1	1	<3	1	46	<5	18	<1
DEC 09...	--	--	--	--	--	--	--	--	--	--	--
MAR 02...	<1	29	<.5	2	<1	<3	3	130	<5	4	220
APR 18...	<1	26	<.5	<1	<1	<3	1	150	<5	4	130
JUN 07...	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	1	30	<.5	<1	1	<3	<1	30	<1	5	<1

DATE	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 13...	<.1	<10	1	<1	<1.0	79	<6	21	11	0	99
DEC 09...	--	--	--	--	--	--	--	--	8	0	97
MAR 02...	.1	<10	2	<1	<1.0	50	<6	5	605	0	54
APR 18...	.1	<10	3	<1	<1.0	44	<6	8	39	0	78
JUN 07...	--	--	--	--	--	--	--	--	14	0	97
AUG 10...	.1	<10	<1	<1	<1.0	57	<6	6	14	0	94

02466031 BLACK WARRIOR RIVER BELOW SELDEN DAM NEAR EUTAW, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	251	262	195	190	147	146	149	139	191	---	205	150
2	249	262	190	190	150	156	148	136	189	205	207	152
3	252	260	225	191	148	172	193	136	174	199	207	145
4	250	261	210	190	155	174	205	135	176	230	201	150
5	254	254	155	190	150	155	215	135	189	235	186	155
6	---	252	---	190	151	157	212	136	184	228	156	152
7	---	253	210	185	148	162	190	135	186	142	205	157
8	---	254	220	190	140	162	193	155	190	145	155	162
9	---	251	210	187	140	111	180	160	192	148	144	162
10	---	252	208	195	142	119	170	163	185	150	152	177
11	---	254	207	196	162	120	162	160	185	131	151	170
12	---	253	225	198	163	125	153	150	185	131	152	175
13	---	253	230	199	210	127	145	165	189	199	149	175
14	---	253	205	198	222	128	144	160	205	191	149	180
15	---	210	210	197	190	128	150	160	211	198	149	175
16	---	230	231	---	192	149	160	166	205	199	148	174
17	256	259	210	188	164	150	190	163	225	192	149	186
18	274	260	210	191	160	149	170	165	230	185	156	189
19	289	235	220	197	174	129	170	162	225	200	149	201
20	280	245	198	186	176	130	155	160	223	198	155	---
21	285	260	199	198	179	117	195	177	220	130	159	---
22	275	255	195	189	140	121	190	160	225	148	160	---
23	298	260	200	197	151	120	192	160	230	148	185	---
24	300	245	199	188	210	117	197	163	225	144	160	---
25	260	250	195	180	222	116	197	205	227	142	160	---
26	256	255	190	192	219	124	128	188	209	151	161	---
27	266	250	180	140	220	120	121	205	226	149	159	---
28	270	255	185	142	158	121	139	175	235	147	148	190
29	255	245	190	136	---	125	141	165	230	150	150	185
30	257	240	185	144	---	120	136	170	210	148	155	190
31	260	---	190	147	---	118	---	172	---	148	155	---
TOTAL	---	7528	---	---	4783	4168	5090	4983	6176	---	5077	---
MEAN	---	251	---	---	171	134	170	161	206	---	164	---
MAX	---	262	---	---	222	174	215	205	235	---	207	---
MIN	---	210	---	---	140	111	121	135	174	---	144	---

02466031 BLACK WARRIOR RIVER BELOW SELDEN DAM NEAR EUTAW, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	23.0	17.0	14.0	15.0	11.0	19.0	24.0	30.0	---	30.0	31.0
2	24.0	21.0	17.0	14.0	16.0	13.0	18.0	24.0	30.0	25.0	31.0	31.0
3	25.0	19.0	18.0	15.0	16.0	14.0	19.0	24.0	27.0	24.0	31.0	31.0
4	25.0	19.0	18.0	14.0	16.0	14.0	20.0	22.0	27.0	28.0	30.0	30.0
5	25.0	19.0	10.0	13.0	15.0	14.0	20.0	21.0	27.0	29.0	31.0	31.0
6	---	20.0	---	15.0	14.0	15.0	19.0	24.0	27.0	28.0	29.0	31.0
7	---	21.0	15.0	16.0	13.0	17.0	18.0	23.0	27.0	25.0	30.0	27.0
8	---	19.0	15.0	15.0	12.0	14.0	18.0	23.0	28.0	25.0	25.0	26.0
9	---	21.0	14.0	14.0	12.0	13.0	16.0	24.0	26.0	25.0	27.0	26.0
10	---	20.0	13.0	13.0	13.0	13.0	15.0	23.0	28.0	25.0	27.0	30.0
11	---	19.0	13.0	13.0	14.0	14.0	15.0	22.0	28.0	25.0	27.0	27.0
12	---	21.0	18.0	13.0	14.0	14.0	15.0	20.0	27.0	25.0	27.0	29.0
13	---	19.0	17.0	13.0	14.0	15.0	15.0	21.0	29.0	24.0	27.0	30.0
14	---	21.0	16.0	13.0	18.0	16.0	15.0	20.0	30.0	28.0	27.0	31.0
15	---	20.0	16.0	13.0	14.0	16.0	15.0	20.0	27.0	29.0	27.0	29.0
16	---	20.0	17.0	---	14.0	16.0	17.0	22.0	26.0	28.0	28.0	29.0
17	24.0	18.0	15.0	14.0	14.0	20.0	18.0	22.0	29.0	27.0	29.0	26.0
18	23.0	18.0	14.0	15.0	14.0	19.0	15.0	23.0	29.0	26.0	26.0	26.0
19	20.0	19.0	15.0	13.0	13.0	15.0	15.0	23.0	30.0	30.0	27.0	26.0
20	20.0	18.0	15.0	14.0	13.0	16.0	17.0	23.0	26.0	27.0	25.0	---
21	20.0	18.0	15.0	15.0	13.0	16.0	20.0	25.0	26.0	27.0	26.0	---
22	20.0	17.0	15.0	14.0	12.0	15.0	18.0	23.0	28.0	28.0	29.0	---
23	27.0	18.0	13.0	13.0	15.0	15.0	18.0	25.0	26.0	27.0	30.0	---
24	30.0	18.0	14.0	13.0	14.0	14.0	22.0	23.0	26.0	26.0	30.0	---
25	20.0	18.0	14.0	16.0	18.0	14.0	22.0	27.0	29.0	29.0	31.0	---
26	20.0	17.0	14.0	18.0	17.0	16.0	20.0	26.0	24.0	30.0	31.0	---
27	20.0	17.0	14.0	14.0	18.0	17.0	20.0	27.0	27.0	29.0	31.0	---
28	25.0	18.0	14.0	14.0	12.0	17.0	24.0	25.0	30.0	29.0	30.0	23.0
29	19.0	17.0	14.0	12.0	---	17.0	24.0	25.0	29.0	29.0	31.0	23.0
30	21.0	16.0	14.0	13.0	---	16.0	23.0	26.0	26.0	29.0	31.0	24.0
31	20.0	---	14.0	15.0	---	16.0	---	26.0	---	29.0	31.0	---
MEAN	---	19.0	---	---	14.4	15.2	18.3	23.4	27.6	---	28.8	---
MAX	---	23.0	---	---	18.0	20.0	24.0	27.0	30.0	---	31.0	---
MIN	---	16.0	---	---	12.0	11.0	15.0	20.0	24.0	---	25.0	---

02466040 BLACK WARRIOR RIVER BELOW SELDEN LOCK, NEAR SAWYERVILLE, AL

LOCATION.--Lat 32°46'10", long 87°49'40", in N½ sec. 30, T. 21 N., R. 3 E., Hale County, Hydrologic Unit 03160112, on downstream side of lock, 1.4 mi upstream from Presley Ford Branch, 6 mi west of Sawyerville, and at mile 43.8.

DRAINAGE AREA.--5,838 mi².

PERIOD OF RECORD.--October 1971 to current year (gage heights only). Prior to October 1984, published as Black Warrior River below Warrior Lock and Dam, near Sawyerville. Unpublished records from October 1957 to September 1971 available in files of U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 59.76 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

COOPERATION.--Records were provided by U.S. Army Corps of Engineers.

EXTREMES (0700) FOR PERIOD OF RECORD.--Maximum gage height, 47.0 ft, Apr. 16, 1979; minimum gage height, 13.4 ft, Oct. 10, 1984, Oct. 8, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25, 1961 reached a stage of 50.1 ft (from files of U.S. Army Corps of Engineers). A minimum gage height of 13.3 ft was reached Aug. 10, 1960 (from files of U.S. Army Corps of Engineers).

EXTREMES (0700) FOR CURRENT YEAR.--Maximum gage height, 34.9 ft, Jan. 17; minimum, 13.9 ft, Oct. 18.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.50	14.50	18.80	21.20	18.50	26.50	25.20	14.90	14.30	17.30	15.60	14.70
2	17.00	14.60	18.10	24.80	18.20	31.10	23.00	16.00	15.00	17.70	15.20	14.60
3	18.70	15.50	17.40	24.40	17.90	33.00	20.40	15.10	15.10	25.50	15.80	14.40
4	18.30	14.20	17.20	22.00	18.00	32.70	19.30	15.00	15.10	31.00	15.60	14.10
5	17.60	15.00	17.00	22.50	17.60	31.60	20.60	16.40	15.40	33.00	15.30	14.80
6	16.70	17.20	15.90	22.30	17.70	30.00	27.40	16.20	17.00	33.20	15.40	14.60
7	16.00	16.20	14.90	19.00	21.20	32.80	29.80	19.20	17.60	31.30	15.30	14.40
8	15.80	16.00	15.40	18.40	23.30	33.40	29.30	18.90	17.40	27.20	15.50	14.50
9	14.90	16.00	15.20	18.10	23.60	32.70	26.80	17.80	17.10	23.20	15.30	14.30
10	14.40	15.60	15.00	19.20	22.40	29.90	25.20	17.40	18.70	21.80	15.00	14.50
11	14.90	15.80	15.00	21.60	19.50	27.00	24.20	17.10	17.90	20.80	15.20	14.70
12	15.20	15.80	15.80	24.00	18.80	24.20	22.40	17.00	17.40	21.20	15.00	14.70
13	15.50	15.50	16.00	27.80	17.90	22.50	20.80	16.30	17.60	21.20	14.20	15.50
14	15.20	16.00	15.50	31.10	17.50	21.40	19.60	16.00	17.40	20.50	14.30	15.40
15	15.20	15.10	15.50	33.40	18.00	20.90	18.60	16.10	18.40	21.60	15.00	15.30
16	14.40	15.20	15.50	34.60	18.00	20.10	17.60	16.80	22.20	20.90	15.10	14.70
17	14.10	15.50	15.20	34.90	18.20	19.40	17.20	16.20	25.30	19.60	15.00	14.40
18	13.90	15.00	15.20	34.00	17.90	18.10	16.20	16.10	26.00	19.80	15.00	14.00
19	14.00	14.60	15.10	30.70	17.60	17.70	16.80	16.20	23.60	21.00	14.70	14.70
20	14.10	16.10	15.10	27.40	18.40	17.50	16.20	16.60	22.20	19.80	14.20	14.70
21	14.00	20.30	15.10	24.60	19.00	18.00	16.30	16.20	24.00	19.00	14.10	14.30
22	14.50	21.20	15.10	21.60	22.00	21.20	15.90	16.20	24.10	18.90	14.70	14.80
23	14.10	19.50	15.50	20.20	25.30	22.10	15.40	16.80	25.00	18.00	14.40	14.60
24	14.20	19.60	17.50	18.50	24.70	21.90	15.10	17.40	25.60	17.70	14.80	15.70
25	14.20	17.20	18.20	18.10	22.60	22.70	15.10	16.40	24.90	16.30	14.70	15.50
26	14.00	16.60	17.30	17.70	21.40	21.20	15.50	16.10	22.10	16.60	14.30	15.50
27	14.30	16.90	16.30	16.90	20.00	19.80	15.20	15.70	20.30	16.10	14.30	16.00
28	14.00	21.50	15.50	17.20	19.90	18.70	15.00	14.90	19.00	15.90	14.60	15.40
29	15.30	22.30	16.80	17.20	---	18.30	14.80	14.60	17.90	16.00	14.30	15.40
30	14.40	20.60	17.20	16.60	---	20.50	14.70	14.50	17.90	15.60	14.80	19.80
31	14.10	---	17.60	18.10	---	25.00	---	15.10	---	15.00	14.80	---
MEAN	15.15	16.84	16.16	23.16	19.82	24.25	19.65	16.30	19.72	21.05	14.89	15.00
MAX	18.70	22.30	18.80	34.90	25.30	33.40	29.80	19.20	26.00	33.20	15.80	19.80
MIN	13.90	14.20	14.90	16.60	17.50	17.50	14.70	14.50	14.30	15.00	14.10	14.00

CAL YR 1988 MEAN 15.49 MAX 24.80 MIN 13.80
WTR YR 1989 MEAN 18.50 MAX 34.90 MIN 13.90

02467000 TOMBIGBEE RIVER AT DEMOPOLIS LOCK AND DAM, NEAR COATOPA, AL

LOCATION.--Lat 32°31'15", long 87°52'39", in NW¼ sec. 22, T. 18 N., R. 2 E., Marengo County, Hydrologic Unit 03160201, on left bank 100 ft upstream from lock and dam, 0.5 mi downstream from Foscue Creek, 2.5 mi west of Demopolis, 3.5 mi upstream from Hall Creek, 13 mi east of Coatopa, and at mile 171.2.

DRAINAGE AREA.--15,385 mi^2.

PERIOD OF RECORD.--August 1928 to current year. Published as "near Coatopa" 1928-55.

REVISED RECORDS.--WSP 782: 1934. WSP 952: 1941. WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 56.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 31, 1939, nonrecording gage, and Nov. 1, 1939, to Sept. 30, 1955, water-stage recorder at site 11.6 mi downstream at datum 26.70 ft lower.

REMARKS.--No estimated daily discharges. Records fair except those below 2,000 ft^3/s, which are poor. Some regulation by Lewis Smith Reservoir on Sipsey Fork (station 02551950), Bankhead Lock and Dam on Black Warrior River, usable capacity, 112,000 acre-ft, Holt Lock and Dam on Black Warrior River, usable capacity, 115,000 acre-ft, and lock at gage. Diversion through lock valves included in figures of discharge. Records since Jan. 16, 1985, include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway.

AVERAGE DISCHARGE.--61 years, 23,230 ft^3/s, 20.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 343,000 ft^3/s, Apr. 18, 1979, gage height, 37.03; minimum, daily, 50 ft^3/s, Aug. 1-6, 1954 (results of closure of and storage above Demopolis lock and dam during construction).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 161,000 ft^3/s, Jan. 18; maximum gage height, 25.64 ft, Jan. 18; minimum daily discharge, 2,620 ft^3/s, Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18500	5390	33100	79600	35100	92300	73500	9150	5010	26800	11500	5910
2	30800	4680	28000	91200	32200	121000	57100	11000	6310	48100	13700	5240
3	37000	3750	23900	80500	28800	135000	41600	8320	9030	80200	16900	4410
4	37300	3920	21200	65400	28900	139000	35400	8060	13600	94800	12800	2990
5	27400	11600	19800	59400	26200	139000	56200	18800	16600	105000	11100	4010
6	19900	16300	12800	48200	33900	135000	89900	32800	30700	107000	8950	5350
7	14900	14400	9390	37500	57300	138000	98600	47600	37300	99500	10500	4170
8	11300	13600	9830	32500	60900	142000	91800	42400	34500	83300	11800	4300
9	5900	10500	10000	38300	58000	140000	86800	35400	42000	64300	9240	3240
10	4700	9630	7950	49700	50900	129000	80600	33400	50400	53800	6840	5450
11	6260	10500	7430	60700	37100	103000	69700	31200	43100	48800	7180	6400
12	7270	10000	11700	75500	31300	71000	53700	25500	35600	50200	6720	7250
13	8320	16100	10700	103000	27600	51600	44100	20700	31800	44400	4290	9320
14	7300	15800	9440	125000	25400	42500	34500	20200	32400	45100	3400	8460
15	7420	10100	10700	140000	28000	38000	29000	28800	49000	48200	6320	8210
16	4270	9090	10100	150000	35600	34700	23900	30900	76600	42700	5760	5760
17	2910	10800	8810	157000	32100	30100	21600	24500	93800	43400	5580	3970
18	2620	8980	8890	161000	31600	26200	18200	20200	97300	53300	7910	3020
19	3450	7540	8020	159000	37900	24000	19400	23600	88200	46500	5780	5470
20	2670	31900	8590	141000	42800	22500	18100	26700	78100	40500	4520	4870
21	5170	57500	9250	105000	49700	31300	16800	26100	73400	39000	3170	3540
22	5030	51300	9220	65900	76100	50800	13500	24800	63200	35800	5820	4930
23	3580	39300	15200	45700	98400	57000	12600	28300	61400	31600	5070	7130
24	5350	33000	32000	33000	103000	57400	9080	33000	61500	23300	5680	9750
25	3260	26800	31900	28400	94800	53700	10300	24200	56500	20600	6050	10800
26	2860	20400	25600	25100	78300	44400	10400	19500	43900	20100	5480	11400
27	3800	35300	20900	23200	56600	35700	9280	12700	35100	17500	3790	11400
28	3730	58500	20700	21400	53500	29800	7970	7890	28300	16000	4030	9200
29	9100	55000	29000	21900	---	29200	6560	5460	26600	14700	4160	17700
30	5660	42400	30200	23900	---	58800	5960	5320	29800	12400	6020	37100
31	5100	---	46800	35300	---	79500	---	6700	---	7790	5870	---
TOTAL	312830	644080	541120	2283300	1352000	2281500	1146150	693200	1351050	1464690	225930	230750
MEAN	10090	21470	17460	73650	48290	73600	38200	22360	45030	47250	7288	7692
MAX	37300	58500	46800	161000	103000	142000	98600	47600	97300	107000	16900	37100
MIN	2620	3750	7430	21400	25400	22500	5960	5320	5010	7790	3170	2990
CFSM	.66	1.40	1.13	4.79	3.14	4.78	2.48	1.45	2.93	3.07	.47	.50
IN.	.76	1.56	1.31	5.52	3.27	5.52	2.77	1.68	3.27	3.54	.55	.56

CAL YR 1988 TOTAL 4473790 MEAN 12220 MAX 67300 MIN 1140 CFSM .79 IN. 10.82
WTR YR 1989 TOTAL 12526600 MEAN 34320 MAX 161000 MIN 2620 CFSM 2.23 IN. 30.29

02467001 TOMBIGBEE RIVER BELOW DEMOPOLIS LOCK AND DAM, NEAR COATOPA, AL

LOCATION.--Lat 32°31'15", long 87°52'48", in NW¼ sec. 22, T. 18 N., R. 2 E., Marengo County, Hydrologic Unit 03160201, on left bank at downstream end of lock and dam, 0.6 mi downstream from Poscue Creek, 2.5 mi west of Demopolis, 3.4 mi upstream from Hall Creek, 13 mi east of Coatopa, and at mile 171.1.

DRAINAGE AREA.--15,385 mi^2.

WATER-STAGE RECORDS

PERIOD OF RECORD.--July 1951 to September 1983, October 1984 to current year (gage heights only). October 1971 to September 1983, October 1984 to current year in reports of Geological Survey. July 1951 to September 1971 in files of U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR AL-85-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 20.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records since Jan. 16, 1985, include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway.

COOPERATON.--Records provided by U.S. Army Corps of Engineers.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 72.3 ft, Apr. 19, 1979; minimum, 10.9 ft, Oct. 4, 1984.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 58.0 ft, Jan. 19; minimum, 12.5 ft, Oct. 18.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.00	13.20	27.60	37.60	27.20	37.90	41.60	14.00	14.00	24.00	15.20	14.00
2	20.20	13.40	24.20	43.50	26.30	46.20	39.40	16.70	13.40	26.70	16.50	13.70
3	25.60	13.60	22.40	43.50	25.00	51.50	34.50	15.30	14.30	39.00	18.50	13.50
4	26.50	12.80	20.80	40.50	24.50	53.80	29.40	14.70	16.80	45.00	18.00	13.00
5	25.10	13.80	20.20	36.90	23.40	54.80	28.90	17.00	18.60	47.30	16.60	12.70
6	20.60	18.00	18.50	33.80	24.00	55.20	38.80	21.30	22.00	48.60	16.10	13.20
7	18.20	17.90	15.60	29.50	29.80	55.50	44.10	28.80	26.20	48.60	15.00	14.20
8	16.80	17.20	15.60	25.90	34.80	56.40	44.80	30.40	27.80	46.60	17.60	13.30
9	14.30	16.30	15.50	25.60	34.70	56.50	43.80	27.80	27.40	42.90	15.80	13.40
10	13.60	15.70	14.90	29.80	33.90	55.80	44.10	25.80	31.60	38.50	15.20	13.30
11	13.80	15.60	14.20	33.40	29.80	53.70	42.40	25.80	31.60	35.50	14.20	14.20
12	14.20	15.60	15.00	36.00	26.60	48.50	39.30	23.80	29.30	33.40	14.80	14.40
13	14.80	16.60	16.30	41.70	24.50	41.80	34.80	21.10	26.80	32.20	13.80	15.00
14	14.30	18.70	15.70	47.40	22.90	36.40	30.10	19.80	25.00	30.60	13.30	15.80
15	13.80	16.80	15.40	51.90	22.60	31.40	25.70	21.20	27.60	31.60	13.20	14.90
16	13.60	15.60	16.20	54.80	25.30	27.80	23.30	24.70	35.90	31.50	14.30	14.50
17	12.80	14.80	15.40	56.40	26.10	25.90	21.50	24.00	42.00	29.30	13.80	13.40
18	12.50	15.70	15.10	57.70	24.50	23.40	20.30	21.30	44.50	31.90	14.40	13.30
19	12.90	15.10	15.00	58.00	26.10	22.50	20.20	20.80	44.80	33.30	14.90	13.20
20	13.20	17.00	14.90	57.40	28.30	21.50	19.50	23.80	42.90	29.90	13.90	13.80
21	12.80	30.30	15.00	54.60	29.20	22.00	19.60	23.80	41.50	28.80	13.60	13.40
22	14.20	33.00	15.30	48.50	35.30	28.80	19.00	24.40	39.20	27.50	13.30	13.20
23	13.60	30.30	14.70	41.60	41.80	34.00	17.60	23.30	37.20	26.90	13.90	14.10
24	13.30	26.60	23.00	24.80	44.90	35.90	17.30	28.20	37.70	24.00	13.80	15.20
25	13.10	23.90	25.80	28.50	45.40	35.80	15.20	26.20	35.50	20.70	13.70	15.00
26	12.70	21.30	24.10	24.30	43.40	32.90	16.30	23.20	32.60	21.20	13.80	15.30
27	13.10	20.30	21.50	22.40	38.90	29.60	16.20	20.30	28.80	19.50	13.30	15.90
28	12.80	31.00	20.40	21.80	33.30	26.40	15.20	17.10	26.10	19.30	13.20	15.40
29	13.90	34.10	21.20	21.20	---	24.20	14.80	14.20	23.20	17.80	13.30	15.60
30	14.10	31.60	24.50	20.80	---	29.80	14.20	13.90	24.80	17.60	13.50	23.20
31	13.00	---	24.90	25.00	---	39.70	---	14.40	---	16.20	14.20	---
MEAN	15.56	19.86	18.67	38.22	30.45	38.57	27.73	21.52	29.64	31.16	14.67	14.44
MAX	26.50	34.10	27.60	58.00	45.40	56.50	44.80	30.40	44.80	48.60	18.50	23.20
MIN	12.50	12.80	14.20	20.80	22.60	21.50	14.20	13.90	13.40	16.20	13.20	12.70

CAL YR 1988 MEAN 16.57 MAX 36.00 MIN 12.20
WTR YR 1989 MEAN 25.02 MAX 58.00 MIN 12.50

02467001 TOMBIGBEE RIVER BELOW DEMOPOLIS LOCK AND DAM NEAR COATOPA, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1988 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLING DEPTH (FEET)	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	TRANSPARENCY (SECCHI DISK) (IN)
DEC										
07...	1215	--	10600	190	172	6.90	12.5	35	8.3	18.0
07...	1216	5.0	--	190	--	7.10	12.5	--	--	--
07...	1217	10.0	--	200	--	7.10	13.0	--	--	--
07...	1218	15.0	--	200	--	7.20	12.5	--	--	--
07...	1219	20.0	--	200	--	7.20	12.5	--	--	--
07...	1220	25.0	--	200	--	7.20	12.5	--	--	--
MAR										
02...	1400	--	124000	124	131	7.70	9.0	--	160	4.50
02...	1401	5.0	--	123	--	7.50	8.5	--	--	--
02...	1402	10.0	--	122	--	7.50	8.5	--	--	--
02...	1403	15.0	--	122	--	7.50	8.5	--	--	--
02...	1404	20.0	--	122	--	7.60	8.5	--	--	--
02...	1405	25.0	--	122	--	7.50	8.5	--	--	--
02...	1406	30.0	--	123	--	7.60	8.5	--	--	--
02...	1407	35.0	--	123	--	7.50	8.5	--	--	--
02...	1408	40.0	--	122	--	7.50	8.5	--	--	--
02...	1409	45.0	--	121	--	7.50	8.5	--	--	--
02...	1410	50.0	--	121	--	7.50	8.5	--	--	--
02...	1411	55.0	--	120	--	7.50	8.5	--	--	--
02...	1412	60.0	--	120	--	7.50	8.5	--	--	--
JUN										
08...	0745	--	35000	144	146	7.30	27.0	30	21	9.00
08...	0746	5.0	--	143	--	7.30	27.0	--	--	--
08...	0747	10.0	--	143	--	7.30	27.0	--	--	--
08...	0748	15.0	--	142	--	7.20	27.0	--	--	--
08...	0749	20.0	--	141	--	7.30	27.0	--	--	--
08...	0750	25.0	--	140	--	7.30	27.0	--	--	--
08...	0751	30.0	--	139	--	7.30	27.0	--	--	--
08...	0752	33.0	--	138	--	7.30	27.0	--	--	--
AUG										
10...	0830	--	6090	136	141	7.40	29.5	30	18	17.0
10...	0831	5.0	--	136	--	7.40	29.5	--	--	--
10...	0832	10.0	--	136	--	7.40	29.5	--	--	--
10...	0833	15.0	--	135	--	7.40	29.5	--	--	--
10...	0834	20.0	--	135	--	7.40	29.5	--	--	--

02467001 TOMBIGBEE RIVER BELOW DEMOPOLIS LOCK AND DAM NEAR COATOPA, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	PH LAB (STAND-ARD UNITS)
DEC										
07...	762	12.4	116	4.0	170	61	22	17	4.5	7.40
07...	--	11.2	--	--	--	--	--	--	--	--
07...	--	11.0	--	--	--	--	--	--	--	--
07...	--	11.0	--	--	--	--	--	--	--	--
07...	--	11.2	--	--	--	--	--	--	--	--
07...	--	11.1	--	--	--	--	--	--	--	--
MAR										
02...	758	13.5	117	1.7	K3200	47	17	14	2.9	7.10
02...	--	13.4	--	--	--	--	--	--	--	--
02...	--	13.0	--	--	--	--	--	--	--	--
02...	--	12.9	--	--	--	--	--	--	--	--
02...	--	12.9	--	--	--	--	--	--	--	--
02...	--	12.9	--	--	--	--	--	--	--	--
02...	--	12.8	--	--	--	--	--	--	--	--
02...	--	12.9	--	--	--	--	--	--	--	--
02...	--	12.8	--	--	--	--	--	--	--	--
02...	--	12.8	--	--	--	--	--	--	--	--
02...	--	12.5	--	--	--	--	--	--	--	--
02...	--	12.7	--	--	--	--	--	--	--	--
02...	--	12.7	--	--	--	--	--	--	--	--
JUN										
08...	754	8.0	102	3.1	190	55	14	18	2.5	7.20
08...	--	7.6	--	--	--	--	--	--	--	--
08...	--	7.6	--	--	--	--	--	--	--	--
08...	--	7.9	--	--	--	--	--	--	--	--
08...	--	7.6	--	--	--	--	--	--	--	--
08...	--	7.6	--	--	--	--	--	--	--	--
08...	--	7.7	--	--	--	--	--	--	--	--
08...	--	7.6	--	--	--	--	--	--	--	--
AUG										
10...	764	7.6	100	1.8	K4	58	24	17	3.7	7.20
10...	--	7.1	--	--	--	--	--	--	--	--
10...	--	7.0	--	--	--	--	--	--	--	--
10...	--	6.7	--	--	--	--	--	--	--	--
10...	--	6.6	--	--	--	--	--	--	--	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)
DEC									
07...	30	5.0	0.20	114	12	0.350	0.030	0.23	0.26
MAR									
02...	22	3.0	.40	83	314	.400	.050	.29	.34
JUN									
08...	15	5.7	.30	99	56	.160	.050	.24	.29
AUG									
10...	21	5.3	.20	84	14	.290	.050	.15	.20

DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)
DEC									
07...	0.070	0.040	0.07	0.04	--	--	<1	--	--
MAR									
02...	.270	.020	.27	.02	7400	400	3	0.700	0.100
JUN									
08...	.090	.030	.09	.03	2000	150	<1	4.40	.300
AUG									
10...	.050	.020	.05	.02	800	90	<1	--	--

02467500 SUCARNOOCHEE RIVER AT LIVINGSTON, AL

LOCATION.--Lat 32°34'25", long 88°11'36", in SW¼ sec. 33, T. 19 N., R. 2 W., Sumter County, Hydrologic Unit 03160202, on right bank 10 ft downstream from bridge on U.S. Highway 11, 500 ft upstream from Southern Railway bridge, 0.8 mi southwest of Livingston, and 9 mi upstream from Alamuchee Creek.

DRAINAGE AREA.--607 mi^2.

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 90.04 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 12, 1939, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--51 years, 818 ft^3/s, 18.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62,200 ft^3/s, Apr. 14, 1979, gage height, 33.47 ft; minimum, 49 ft^3/s, Sept. 11, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 8	2400	*4,660	*18.64				

Minimum discharge, 116 ft^3/s, Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	569	243	867	3170	1000	1550	3930	371	379	1570	421	163
2	2030	250	677	3260	782	1850	4000	333	349	2660	700	155
3	1570	255	575	3230	648	2280	3190	344	706	2850	571	156
4	897	242	507	2250	600	2640	1320	525	1640	3000	572	141
5	459	587	466	1100	583	3370	970	924	1740	3390	560	136
6	307	771	435	865	623	3790	979	1640	2690	3290	369	133
7	231	774	405	770	1110	4180	877	1440	2990	2680	306	126
8	195	500	385	718	1110	4520	750	818	2830	2220	271	130
9	175	367	369	882	933	4460	1710	564	2800	2020	252	127
10	163	305	353	1790	758	2910	2730	500	3000	2170	244	124
11	158	286	348	2160	668	1210	2990	529	3150	2140	226	383
12	152	264	350	2240	610	938	2910	485	3030	2350	211	460
13	143	577	366	2630	571	835	2000	405	1630	2260	201	336
14	137	991	348	2380	545	760	1130	460	939	1540	195	236
15	131	960	335	2090	527	700	901	976	1830	1060	188	196
16	126	561	363	1860	500	646	796	1740	2210	783	359	171
17	125	433	408	1460	471	596	722	1900	2430	655	281	159
18	124	366	402	1090	453	554	646	1450	1750	588	271	157
19	128	355	357	926	446	529	589	2360	867	551	437	151
20	176	2220	326	1020	456	543	675	2690	671	738	356	143
21	1270	2890	323	1010	1390	1970	596	3150	580	1410	281	134
22	1610	2880	313	852	1920	2790	519	3230	538	2010	239	131
23	1150	1960	1250	724	1890	3200	468	3310	695	2600	209	128
24	550	798	1540	654	1110	3170	436	3360	717	1430	194	129
25	392	607	1290	606	782	2770	407	3330	861	1050	208	134
26	322	736	862	569	676	1870	374	3110	671	705	221	143
27	279	2460	631	558	629	1200	352	2110	759	512	210	164
28	271	2670	567	563	1260	978	327	922	680	428	179	189
29	471	2600	582	540	---	1350	374	601	600	440	168	322
30	327	1590	630	533	---	3390	333	500	872	402	163	1520
31	260	---	2640	729	---	3730	---	426	---	348	159	---
TOTAL	14898	30498	19270	43229	23051	65279	38001	44503	44604	49850	9222	6777
MEAN	481	1017	622	1394	823	2106	1267	1436	1487	1608	297	226
MAX	2030	2890	2640	3260	1920	4520	4000	3360	3150	3390	700	1520
MIN	124	242	313	533	446	529	327	333	349	348	159	124
CFSM	.79	1.67	1.02	2.30	1.36	3.47	2.09	2.37	2.45	2.65	.49	.37
IN.	.91	1.87	1.18	2.65	1.41	4.00	2.33	2.73	2.73	3.06	.57	.42

CAL YR 1988 TOTAL 167918 MEAN 459 MAX 2890 MIN 73 CFSM .76 IN. 10.29
WTR YR 1989 TOTAL 389182 MEAN 1066 MAX 4520 MIN 124 CFSM 1.76 IN. 23.85

02469761 TOMBIGBEE RIVER AT COFFEEVILLE LOCK AND DAM, NEAR COFFEEVILLE, AL

LOCATION.--Lat 31°45'30", long 88°07'45", in NE¼NE¼ sec. 13, T. 9 N., R. 2 W., Choctaw County, Hydrologic Unit 03160203, near right bank at Coffeeville Lock and Dam, 4 mi downstream from Turkey Creek, 2 mi west of Coffeeville, and at mile 74.7.

DRAINAGE AREA.--18,417 mi².

PERIOD OF RECORD.--October 1960 to current year (water years 1961-67 published in 1977 annual report).

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 14.00 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Some regulation by Lewis Smith Reservoir on Sipsey Fork (station 02451950), Bankhead Lock and Dam on Black Warrior River, usable capacity, 112,000 acre-ft, Holt Lock and Dam on Black Warrior River, usable capacity, 115,000 acre-ft, and lock and dam at gage. Records since Jan. 16, 1985, include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway.

AVERAGE DISCHARGE.--29 years, 29,360 ft³/s, 21.65 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 290,000 ft³/s, Apr. 22, 1979, gage height, 65.46; minimum daily discharge, 902 ft³/s, June 28, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1, 1874 reached a stage of 67.4 ft, discharge not determined, at site 0.5 mi downstream at present datum.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 105,000 ft³/s, Mar. 11; maximum gage height, 54.19 ft, Jan. 22; minimum daily discharge, 2,040 ft³/s, Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20600	5020	44300	76700	41700	60900	73500	9860	7660	38700	11800	5970
2	22900	6020	32800	93400	38800	74200	70900	14700	6370	53400	14600	6310
3	37800	6110	27200	89100	35300	85600	61900	11300	11000	75200	17200	5480
4	40000	3030	22800	81700	30500	89500	51100	10100	17000	81000	18300	4680
5	36400	12100	20000	70000	30100	93300	57700	15600	19700	80500	13800	2040
6	23600	18400	18500	58900	29600	97100	65700	25400	27200	82300	12500	5740
7	17000	18300	11900	48300	44400	99400	72900	39900	37200	84600	8240	6320
8	14900	15300	11000	38000	60200	101000	74500	48200	43100	83500	15300	3400
9	7240	13900	11100	36800	58500	102000	74800	42200	45000	79300	10500	5070
10	6690	9410	11100	44700	56000	102000	78800	36300	50900	70000	9800	4300
11	5090	11400	9060	55700	47500	105000	77900	34400	52200	63800	6730	7880
12	8280	12900	10500	64200	39100	102000	70500	30800	48500	58600	9990	9230
13	8940	14200	13900	70400	32900	93500	63100	23600	39200	55100	5520	9760
14	10000	21500	11400	94300	29100	77700	55000	21200	37300	50000	4710	11800
15	6580	15100	12000	96200	27300	61200	41200	23600	45200	49800	4810	7450
16	6550	11000	12000	100000	32300	48400	32300	31700	58900	50500	9760	8890
17	4370	12800	11800	98000	35500	38100	27500	30900	69200	45100	5180	3280
18	2240	15000	10700	98800	31800	31000	24800	24900	78900	48300	9520	4730
19	3020	14200	9400	102000	34400	28500	21900	24100	82000	52400	9350	4370
20	3850	26700	9600	104000	41200	25700	22800	30700	79100	46900	4970	7420
21	5610	49500	11100	102000	46700	29400	21700	33000	74800	42200	4820	3770
22	11200	59000	11000	97800	58600	48400	18600	35200	68900	40900	5080	3940
23	6690	51400	13400	91100	67800	59400	16200	31900	64400	40000	7720	7820
24	6380	40700	31900	72800	74400	63600	14600	46300	63000	35000	4770	8990
25	6150	33300	36600	52000	82200	62800	10600	43500	60800	29500	8430	9770
26	2120	25000	32400	37000	79000	57600	13300	33200	56300	27200	5410	11200
27	4900	28300	24800	27500	73200	48100	12400	23200	47200	22700	5560	13300
28	4730	49700	22200	27400	60600	37800	10800	15700	37700	20600	4260	11300
29	8140	60100	23200	25400	---	35500	9770	8690	32200	16700	4570	12300
30	9050	50100	30900	25300	---	55700	8450	6890	37000	16200	6040	27100
31	4450	---	44700	34500	---	67300	---	8660	---	14400	7760	---
TOTAL	355470	709490	603260	2114000	1318700	2081700	1255220	815700	1397930	1554400	267000	233610
MEAN	11470	23650	19460	68190	47100	67150	41840	26310	46600	50140	8613	7787
MAX	40000	60100	44700	104000	82200	105000	78800	48200	82000	84600	18300	27100
MIN	2120	3030	9060	25300	27300	25700	8450	6890	6370	14400	4260	2040
CFSM	.62	1.28	1.06	3.70	2.56	3.65	2.27	1.43	2.53	2.72	.47	.42
IN.	.72	1.43	1.22	4.27	2.66	4.20	2.54	1.65	2.82	3.14	.54	.47

CAL YR 1988	TOTAL 5209820	MEAN 14230	MAX 63500	MIN 1170	MEAN †14320	CFSM †0.78	IN. †10.58
WTR YR 1989	TOTAL 12706480	MEAN 34810	MAX 105000	MIN 2040	MEAN †34850	CFSM †1.89	IN. †25.69

† Adjusted for change in Lewis Smith Reservoir.

02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, NEAR COFFEEVILLE, AL
(National stream-quality accounting network station)

LOCATION.--Lat 31°45'30", long 88°07'35", in SW¼SW¼ sec. 7, T. 9 N., R. 2 W., Choctaw County, Hydrologic Unit 03160203, near right bank at downstream end of Coffeeville Lock and Dam, 2 mi west of Coffeeville, 4 mi downstream from Turkey Creek, and at mile 74.2.

DRAINAGE AREA.--18,417 mi^2.

WATER-STAGE RECORDS

PERIOD OF RECORD.--August 1960 to current year (gage heights only). October 1971 to current year in reports of Geological Survey. August 1960 to September 1971 in files of U.S. Army Corps of Engineers.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 14.00 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Records since Jan. 16, 1985, include diversions from Tennessee River basin through Bay Springs lock on Tennessee-Tombigbee Waterway.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES (AT 0700) FOR PERIOD OF RECORD.--Maximum gage height, 64.2 ft, Mar. 4, 1961, Apr. 23, 1979; minimum, 12.8 ft, Oct. 4, 1987.

EXTREMES (AT 0700) FOR CURRENT YEAR.--Maximum gage height, 51.6 ft, Jan. 22; minimum, 15.1 ft, Oct. 19.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.50	16.10	35.60	37.00	31.20	40.00	43.50	19.70	18.20	37.50	22.30	17.70
2	23.20	16.00	32.70	41.30	31.70	41.50	44.00	20.80	17.20	35.30	22.40	17.00
3	27.90	16.60	30.40	44.00	31.10	44.50	43.10	21.90	18.30	41.70	22.20	17.10
4	30.50	16.50	28.10	44.40	30.00	46.30	40.60	20.60	20.20	44.50	23.50	16.40
5	31.30	18.00	26.30	43.80	29.30	47.60	39.60	20.00	22.60	45.80	22.50	16.10
6	28.90	21.90	25.00	42.10	28.30	48.90	41.60	24.00	23.90	46.50	21.40	16.10
7	25.60	23.00	22.90	39.60	29.70	49.80	43.40	28.10	28.20	47.20	20.00	16.90
8	22.80	23.10	20.40	36.70	34.70	50.50	44.60	32.00	31.10	47.80	20.10	16.30
9	20.70	21.60	19.70	34.20	37.00	50.80	45.10	32.90	32.70	47.70	20.50	15.80
10	17.80	20.50	19.50	33.90	37.80	51.20	46.10	31.80	34.80	47.00	19.20	16.40
11	16.50	19.40	19.30	35.10	37.10	51.50	46.70	30.70	36.30	45.40	18.30	16.40
12	17.60	19.50	18.40	37.00	34.60	51.50	46.60	29.90	36.40	42.90	18.00	17.60
13	17.30	20.50	20.20	39.20	32.30	51.00	45.40	28.40	34.80	40.80	17.90	17.90
14	17.60	22.50	19.90	42.10	30.20	49.70	42.50	26.50	32.90	39.10	16.60	18.90
15	17.20	23.00	19.80	44.50	28.70	46.90	38.60	25.40	32.40	38.10	16.60	18.20
16	16.70	21.40	19.70	46.10	28.00	42.00	35.80	27.20	36.50	37.90	17.70	18.60
17	16.40	20.60	19.70	47.40	29.80	37.90	33.50	28.90	40.10	37.30	17.70	16.80
18	15.40	20.90	19.60	48.50	29.80	34.80	31.90	28.00	42.50	36.00	18.30	16.30
19	15.10	20.60	18.80	49.40	29.30	32.60	30.10	26.50	43.80	37.30	18.20	16.00
20	15.40	20.80	18.60	50.60	30.70	30.80	29.10	26.90	44.70	37.20	17.80	16.40
21	15.70	29.30	19.00	51.30	32.20	29.50	28.40	28.90	44.90	35.70	16.70	16.50
22	18.10	35.10	19.30	51.60	34.60	31.70	27.10	30.10	44.20	34.90	16.80	15.20
23	17.80	36.00	19.40	51.30	38.30	36.50	25.00	30.10	43.00	33.70	17.60	16.50
24	17.20	34.30	23.90	49.80	41.30	39.50	23.70	31.20	41.90	32.90	17.00	17.00
25	16.90	32.10	28.90	46.40	43.30	40.50	22.00	33.70	40.90	31.30	17.20	17.50
26	16.40	29.30	30.10	40.30	44.10	40.00	21.10	32.10	40.30	29.80	17.50	18.40
27	16.00	28.10	28.50	35.90	44.20	38.50	20.10	29.30	38.70	28.90	16.80	19.30
28	17.00	31.70	26.30	33.00	42.60	36.00	20.20	26.30	36.70	27.10	16.80	19.80
29	16.10	36.10	25.00	30.70	---	33.70	20.40	22.10	34.80	26.10	16.30	18.90
30	19.00	37.30	26.70	29.00	---	36.30	19.50	18.90	34.60	24.70	16.80	22.20
31	16.80	---	28.30	29.10	---	40.90	---	18.20	---	24.10	17.20	---
MEAN	19.43	24.39	23.55	41.46	34.00	42.03	34.64	26.81	34.25	37.49	18.64	17.34
MAX	31.30	37.30	35.60	51.60	44.20	51.50	46.70	33.70	44.90	47.80	23.50	22.20
MIN	15.10	16.00	18.40	29.00	28.00	29.50	19.50	18.20	17.20	24.10	16.30	15.20

CAL YR 1988 MEAN 20.87 MAX 35.60 MIN 14.60
WTR YR 1989 MEAN 29.49 MAX 51.60 MIN 15.10

02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, NEAR COFFEEVILLE, AL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1969 to September 1973, August 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURES: April 1975 to current year.

REMARKS.--Miscellaneous samples of chemical data published for water years 1967 and 1969. No specific conductance data and water temperature data for several periods due to equipment malfunctions. Water temperatures for August 1986, published in WDR AL-86-1, have been discredited and should not be used.

COOPERATION.--Specific conductance and temperature data furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 360 microsiemens, Nov. 15, 1987; minimum daily, 54 microsiemens, June 7, 1983.
WATER TEMPERATURES: Maximum daily, 34.0°C, July 14, 1980, July 31, Aug. 22, 1987; minimum daily, 5.0°C, Jan. 20, 1977, Dec. 30, 31, 1983, and Jan. 2, 1984.

EXTREMES FOR CURRENT.--
SPECIFIC CONDUCTANCE: Maximum daily, 235 microsiemens, Oct. 28; minimum daily, 73 microsiemens, Apr. 9, July 18.
WATER TEMPERATURE: Maximum daily, 32.6°C, Sept. 5; minimum daily, 9.5°C, Mar. 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT 20...	1025	4910	238	233	7.60	21.0	11	762	9.3	104	5
FEB 23...	1040	67200	128	144	7.30	9.0	77	771	11.8	101	--
APR 13...	1020	62800	132	124	7.30	15.0	39	767	9.0	89	K160
AUG 17...	1000	4620	146	154	7.40	29.0	16	762	8.0	104	26

DATE	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT 20...	50	7.80	49	34	17	0.10	5.7	141	134	0.19	1870
FEB 23...	35	7.50	36	29	7.9	.10	7.2	163	98	.22	29600
APR 13...	31	7.40	31	16	4.3	.10	8.0	84	72	.11	14200
AUG 17...	36	7.20	36	17	9.1	.10	7.1	100	85	.14	1250

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)
OCT 20...	--	<.010	0.300	0.030	0.010	0.67	0.70	0.040	0.030	0.020	0.04
FEB 23...	0.250	.040	.290	.060	.090	.24	.30	.200	.050	.070	.20
APR 13...	--	<.010	.220	.060	.050	.44	.50	.070	.030	<.010	.07
AUG 17...	--	<.010	.250	.030	.030	.37	.40	.060	.020	.010	.06

02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, NEAR COFFEEVILLE, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT 20...	0.01	10	1	39	<.5	1	<1	<3	2	180	<5
FEB 23...	0	930	1	43	<.5	<1	<1	<3	2	1300	<5
APR 13...	.03	70	<1	30	<.5	3	<1	<3	7	350	<5
AUG 17...	.01	40	1	27	<.5	<1	<1	<3	<1	150	<1

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	ALPHA, DISSOLVED (UG/L AS U-NAT)
OCT 20...	8	11	<.1	<10	<1	<1	<1.0	120	<6	14	--
FEB 23...	<4	160	<.1	<10	<1	<1	<1.0	110	<6	41	4.0
APR 13...	<4	12	.1	<10	<1	<1	<1.0	89	<6	8	--
AUG 17...	<4	15	<.1	<10	<1	<1	<1.0	92	<6	7	--

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 20...	--	--	--	--	--	--	--	7	90	99
FEB 23...	10	2.0	6.2	1.7	5.6	0.04	0.14	229	41500	76
APR 13...	--	--	--	--	--	--	--	178	30200	65
AUG 17...	--	--	--	--	--	--	--	19	237	99

02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM NEAR COFFEEVILLE, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	210	167	121	---	---	97	143	145	---	102	115
2	222	205	164	135	117	117	108	133	145	---	107	124
3	198	164	160	139	110	122	112	138	146	---	106	123
4	192	165	152	129	122	115	115	141	151	92	104	118
5	190	151	155	139	123	97	111	149	146	122	111	123
6	187	155	153	131	103	102	110	150	161	126	105	124
7	173	161	156	127	124	117	118	---	160	122	103	127
8	168	192	152	124	129	107	121	137	144	125	96	129
9	162	174	150	123	138	104	73	---	135	109	110	136
10	158	176	154	---	141	95	118	---	131	86	97	133
11	162	178	158	146	142	92	79	142	138	82	85	128
12	160	176	165	131	140	91	122	149	148	80	104	128
13	178	197	164	---	141	115	134	142	---	80	105	139
14	176	176	168	---	150	101	154	133	146	78	101	135
15	181	182	---	---	161	107	164	138	149	78	109	134
16	180	180	173	131	146	124	130	134	---	79	114	132
17	179	180	144	---	138	125	126	136	---	78	100	131
18	188	170	145	114	132	117	132	128	---	73	97	132
19	192	175	147	100	123	116	142	121	---	80	104	133
20	190	158	184	93	130	125	140	124	148	78	109	132
21	191	160	195	91	118	111	138	150	140	78	114	128
22	190	163	194	97	128	110	140	---	141	84	117	121
23	177	167	196	112	132	109	140	---	167	90	120	122
24	200	168	160	105	130	107	142	---	190	88	120	121
25	189	164	162	116	130	107	143	138	206	86	126	128
26	210	160	148	115	111	109	144	140	175	87	125	138
27	216	153	145	115	122	110	143	143	145	87	125	136
28	235	148	148	116	113	101	144	142	---	97	122	130
29	---	148	149	125	---	---	143	141	---	97	121	128
30	222	146	150	112	---	98	145	144	---	96	124	126
31	214	---	142	116	---	117	---	143	---	---	118	---
TOTAL	---	5102	---	---	---	---	3828	---	---	---	3401	3854
MEAN	---	170	---	---	---	---	128	---	---	---	110	128
MAX	---	210	---	---	---	---	164	---	---	---	126	139
MIN	---	146	---	---	---	---	73	---	---	---	85	115

02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM NEAR COFFEEVILLE, AL--Continued

WATER TEMPERATURE (DEG C) OF WATER, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.0	20.0	15.0	13.0	---	---	17.5	22.5	27.0	---	29.0	32.0
2	28.0	19.5	14.0	12.5	14.5	9.5	18.0	23.0	27.0	---	29.0	32.0
3	27.5	19.5	14.0	13.0	14.0	10.0	18.0	23.0	28.0	---	30.0	31.5
4	25.0	20.5	14.0	12.0	13.5	11.0	18.5	23.0	28.0	26.0	30.0	31.0
5	25.0	20.0	14.0	12.0	13.5	11.5	19.0	23.0	28.0	26.0	30.0	32.6
6	25.0	20.0	14.0	15.0	13.0	11.0	18.5	23.0	28.0	26.0	30.5	31.0
7	24.0	19.5	14.0	12.0	13.0	12.0	18.0	---	28.0	26.0	30.0	31.0
8	24.0	20.0	14.0	12.0	12.0	11.0	19.0	23.0	27.0	26.0	30.0	31.0
9	23.5	19.5	14.0	---	12.0	12.0	16.0	---	26.5	26.0	30.0	31.5
10	23.5	19.0	14.0	---	10.0	12.0	15.0	---	27.0	26.0	30.0	31.0
11	24.0	19.0	13.0	12.0	10.0	13.0	15.0	22.0	27.0	27.0	29.0	31.0
12	24.0	19.0	12.0	12.0	10.0	13.0	15.0	22.0	26.5	27.5	30.0	31.0
13	22.0	19.0	12.0	---	10.0	14.0	15.0	21.5	---	27.0	29.5	29.5
14	22.0	20.0	12.0	---	11.0	15.0	15.0	22.0	27.0	27.0	29.0	30.0
15	22.0	20.0	---	---	12.0	15.0	16.0	22.0	26.0	27.5	30.0	29.0
16	22.0	20.0	12.0	---	12.0	16.0	16.0	21.5	---	27.5	30.0	29.0
17	22.0	20.0	12.0	---	12.0	16.0	17.0	22.0	---	28.0	30.0	29.0
18	21.5	20.0	12.0	12.0	12.0	16.0	17.0	24.0	---	28.0	30.0	29.0
19	21.5	20.0	12.0	11.0	12.0	16.0	18.0	23.0	---	28.0	30.0	29.0
20	21.0	19.0	12.0	12.0	12.5	17.0	18.0	22.0	26.0	28.0	30.0	29.0
21	21.0	18.5	12.0	11.0	14.0	17.0	18.0	23.0	26.0	28.0	30.0	29.0
22	21.0	18.0	12.0	11.0	13.0	17.0	18.0	---	26.0	27.5	30.0	29.0
23	21.0	17.5	12.0	11.0	12.0	17.0	19.0	---	27.0	28.0	31.0	29.0
24	21.0	17.0	12.0	11.0	12.0	16.0	19.0	---	26.5	28.0	31.0	27.0
25	21.0	17.0	13.0	12.0	11.0	16.0	20.0	24.0	27.0	28.0	31.0	26.0
26	21.0	17.0	13.0	12.0	10.5	16.0	21.5	24.5	27.0	28.0	31.0	26.0
27	21.0	17.0	13.0	12.0	11.0	17.0	22.0	25.5	26.5	28.0	31.0	25.0
28	21.5	16.0	13.0	12.0	11.0	16.0	22.0	25.5	---	29.0	31.0	25.0
29	---	16.0	12.0	11.5	---	---	22.0	27.0	---	29.0	31.0	25.0
30	21.0	16.0	13.0	13.0	---	17.0	22.5	26.5	---	29.0	31.0	25.0
31	19.5	---	13.0	13.0	---	17.0	---	26.0	---	29.0	32.0	---
TOTAL	---	563.5	---	---	---	---	543.5	---	---	---	936.0	876.1
MEAN	---	18.8	---	---	---	---	18.1	---	---	---	30.2	29.2
MAX	---	20.5	---	---	---	---	22.5	---	---	---	32.0	32.6
MIN	---	16.0	---	---	---	---	15.0	---	---	---	29.0	25.0

02469800 SATILPA CREEK NEAR COFFEEVILLE, AL

LOCATION.--Lat 31°44'39", long 88°01'21", in SW¼SW¼ sec. 18, T. 9 N., R. 1 E., Clarke County, Hydrologic Unit 03160203, near left bank on downstream side of bridge on State Highway 12, 0.2 mi upstream from unnamed tributary, 3 mi downstream from Harris Creek, and 3.8 mi east of Coffeeville.

DRAINAGE AREA.--164 mi².

PERIOD OF RECORD.--June 1956 to September 1970, October 1970 to September 1974 (flood hydrograph and low flow only), October 1974 to current year.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 39.80 ft above National Geodetic Vertical Datum of 1929 (levels by Alabama Highway Department).

REMARKS.--Estimated daily discharges: Apr. 6-12. Records good except those for period of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--29 years (water years 1957-70, 1975-89), 227 ft³/s, 18.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft³/s, July 8, 1956, gage height, 18.37 ft; minimum discharge, 4.8 ft³/s, Oct. 21, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,600 ft³/s and annual maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 1	1000	2,930	13.37	Apr. 5	2100	*5,240	*14.13
Mar. 30	1900	4,000	13.77				

Minimum discharge, 21 ft³/s, Sept. 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	67	292	2500	206	296	901	773	79	1910	305	40
2	179	62	244	1550	183	387	489	882	70	1580	212	36
3	440	51	216	591	170	1130	396	341	112	1400	171	33
4	312	49	200	397	160	591	539	264	163	847	145	30
5	132	518	183	312	162	441	3320	325	163	635	125	29
6	90	288	170	281	181	761	e3100	250	303	425	111	28
7	70	137	163	256	176	427	e1750	197	211	406	101	28
8	59	105	155	234	173	311	e1300	167	456	745	93	27
9	52	259	145	213	150	260	e900	155	1070	633	84	27
10	48	197	139	227	139	230	e1350	156	580	595	78	26
11	47	136	175	225	138	209	e1450	143	249	358	74	25
12	45	111	221	216	138	191	e780	125	1020	265	70	26
13	41	326	164	246	132	176	577	115	1660	222	66	32
14	36	295	144	330	132	165	474	140	687	275	63	30
15	34	187	136	1130	129	153	425	246	1140	345	60	27
16	32	175	218	682	124	161	371	169	1460	265	59	26
17	31	522	215	372	125	158	318	135	739	221	63	25
18	30	292	158	297	125	140	284	116	371	350	61	24
19	30	195	141	267	189	129	267	263	315	1040	56	24
20	30	808	134	362	167	126	319	227	408	415	52	23
21	44	1240	130	334	289	429	260	536	276	275	51	22
22	121	482	130	247	276	904	237	352	215	221	46	22
23	83	270	139	222	178	1050	215	297	178	272	43	21
24	56	219	229	206	147	1170	193	509	156	400	40	21
25	44	187	192	191	138	534	177	287	140	715	38	23
26	38	172	147	180	137	385	164	192	132	436	36	28
27	34	1240	129	194	137	313	151	147	206	325	34	31
28	33	1800	129	184	253	265	252	137	185	430	33	31
29	54	652	140	172	---	410	650	121	334	309	32	68
30	108	377	133	217	---	2670	773	99	1010	212	34	71
31	77	---	880	295	---	2470	---	88	---	290	34	---
TOTAL	2499	11419	5991	13130	4654	17042	22382	7954	14088	16817	2470	904
MEAN	80.6	381	193	424	166	550	746	257	470	542	79.7	30.1
MAX	440	1800	880	2500	289	2670	3320	882	1660	1910	305	71
MIN	30	49	129	172	124	126	151	88	70	212	32	21
CFSM	.49	2.32	1.18	2.58	1.01	3.35	4.55	1.56	2.86	3.31	.49	.18
IN.	.57	2.59	1.36	2.98	1.06	3.87	5.08	1.80	3.20	3.81	.56	.21

CAL YR 1988 TOTAL 60343.4 MEAN 165 MAX 1940 MIN 7.7 CFSM 1.01 IN. 13.69
WTR YR 1989 TOTAL 119350 MEAN 327 MAX 3320 MIN 21 CFSM 1.99 IN. 27.07

e Estimated

02471001 CHICKASAW CREEK NEAR KUSHLA, AL

LOCATION.--Lat 30°48'10", long 88°08'36", in SE¼NE¼ sec. 11, T. 3 S., R. 2 W., Mobile County, Hydrologic Unit 03160204, on left bank at upstream side of highway bridge, 0.7 mi upstream from Seabury Creek, 1.4 mi southeast of Kushla, 7 mi northwest of Mobile, and at mile 12.2.

DRAINAGE AREA.--125 mi^2.

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1968, published as 02471000, Chickasaw Creek "near Whistler."

REVISED RECORDS.--WSP 1434: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3.85 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 2, 1964, water-stage recorder, Aug. 3, 1964, to Dec. 9, 1965, nonrecording gage, and Dec. 10, 1965, to September 1968, water-stage recorder at site 1.4 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 1-27. Records good except those for period of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--38 years, 267 ft^3/s, 29.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,000 ft^3/s, Apr. 13, 1955, gage height, 25.4 ft, from floodmarks, site and datum then in use, from rating curve extended about 10,600 ft^3/s, on basis of slope-area measurement of peak flow; minimum, 18 ft^3/s, Sept. 3, 4, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 9	0600	*2,220	*13.36				

Minimum discharge, 42 ft^3/s, Sept. 22-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e350	118	116	155	93	170	158	217	80	275	255	78
2	e550	120	111	148	91	190	138	244	75	319	195	66
3	e1200	114	108	129	90	519	126	204	76	871	142	57
4	e1100	111	108	115	87	410	119	126	116	975	118	54
5	e650	199	105	106	86	246	318	107	116	864	102	53
6	e400	255	101	102	90	232	532	107	108	501	91	56
7	e300	161	100	101	93	199	274	92	109	315	83	56
8	e240	126	101	101	90	168	178	80	733	242	79	51
9	e200	117	101	97	85	151	151	76	2080	239	93	50
10	e180	114	103	92	82	138	140	72	1110	202	87	49
11	e170	110	165	95	81	128	137	72	425	162	78	48
12	e165	108	256	106	81	117	129	68	279	137	74	51
13	e160	181	214	127	81	110	130	63	218	117	82	96
14	e155	271	149	139	83	104	115	68	216	114	84	68
15	e150	186	130	225	84	103	112	116	416	207	76	72
16	e145	147	126	194	81	132	120	158	674	292	72	56
17	e140	161	135	138	79	134	111	109	426	195	68	51
18	e136	161	122	119	103	113	100	83	252	149	65	48
19	e132	141	113	114	144	102	92	224	204	144	68	45
20	e128	180	110	172	133	92	89	458	192	149	71	43
21	e124	348	110	291	464	351	88	1190	180	120	67	43
22	e120	227	111	188	531	779	89	721	271	205	67	42
23	e135	153	109	140	278	817	85	344	311	717	64	42
24	e145	136	108	123	177	693	77	445	206	510	63	42
25	e130	128	177	113	152	380	73	555	193	313	60	52
26	e122	123	224	109	139	256	69	267	143	220	57	67
27	e118	123	142	104	132	210	67	170	123	176	56	69
28	117	135	123	100	134	177	66	135	118	220	61	66
29	116	137	122	96	---	158	127	112	126	152	60	77
30	118	121	122	94	---	216	192	97	202	417	66	148
31	122	---	146	96	---	218	---	90	---	387	93	---
TOTAL	8018	4712	4068	4029	3844	7813	4202	6870	9778	9906	2697	1796
MEAN	259	157	131	130	137	252	140	222	326	320	87.0	59.9
MAX	1200	348	256	291	531	817	532	1190	2080	975	255	148
MIN	116	108	100	92	79	92	66	63	75	114	56	42
CFSM	2.07	1.26	1.05	1.04	1.10	2.02	1.12	1.77	2.61	2.56	.70	.48
IN.	2.39	1.40	1.21	1.20	1.14	2.33	1.25	2.04	2.91	2.95	.80	.53

CAL YR 1988 TOTAL 92234 MEAN 252 MAX 2960 MIN 42 CFSM 2.02 IN. 27.45
WTR YR 1989 TOTAL 67733 MEAN 186 MAX 2080 MIN 42 CFSM 1.48 IN. 20.16

e Estimated

RESERVOIRS IN MOBILE RIVER BASIN

02393500 ALLATOONA RESERVOIR.--Lat 34°09'46", long 84°43'40", Bartow County, Ga., Hydrologic Unit 03150104; at forebay of dam on Etowah River, 2.8 mi upstream from Nashville, Chattanooga & St. Louis Railway bridge, 4 mi east of Cartersville, Ga., and 6 mi upstream from Pumpkinvine Creek. DRAINAGE AREA, 1,120 mi^2. PERIOD OF RECORD, December 1949 to current year. REVISED RECORDS, WDR GA-80-1: Drainage area. WDR GA-84-1: Drainage area. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

Lake is formed by concrete gravity dam. Spillway (crest elevation, 835.0 ft) is equipped with nine taintor gates 40 ft wide by 25 ft high. There are four sluices 5.67 ft by 10 ft high and one sluice 4.0 ft in diameter. Storage began Dec. 27, 1949; water in lake first reached minimum pool elevation Feb. 5, 1950. Total capacity at elevation 860.0 ft, top of gates, is 670,000 acre-ft, of which 587,100 acre-ft is controlled storage above 800.0 ft, minimum pool. Lake is used for flood control and power. Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 693,800 acre-ft, Apr. 10, 1964, elevation, 861.19 ft; minimum, 119,600 acre-ft, Dec. 4, 1954, elevation, 809.34 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 477,500 acre-ft, June 25, elevation, 848.41 ft; minimum, 228,300 acre-ft, Dec. 31, elevation, 826.19 ft.

02399499 WEISS LAKE.--Lat 34°10'19", long 85°45'14", in SE¼ sec. 12, T. 10 S., R. 8 E., Cherokee County, Hydrologic Unit 03150105, about 75 ft upstream from centerline of left end of Weiss Dam on Coosa River on U.S. Highway 411, 1.2 mi east of Leesburg, 4 mi upstream from Yellow Creek, and at mile 226.1. DRAINAGE AREA, 5,270 mi^2, approximately. PERIOD OF RECORD, March 1961 to current year. GAGE, water-stage recorder with remote indicating gages, referenced to a vertical staff gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by a compacted earth dam with a concrete gated spillway section. Spillway is equipped with five taintor gates 40 ft wide by 38 ft high. Storage began Mar. 28, 1961. Total capacity at elevation 564 ft is 360,400 acre-ft. Reservoir is used for power development and flood control. Gage-height record and capacity table furnished by Alabama Power Co.

EXTREMES FOR PERIOD OF RECORD: Maximum daily contents, 559,100 acre-ft, Apr. 8, 1977, elevation, 570.91 ft; minimum daily contents, 127,200 acre-ft, Jan. 1, 1970, elevation, 556.31 ft.

EXTREMES FOR CURRENT YEAR: Maximum daily contents, 310,900 acre-ft, June 4, elevation, 564.15 ft; minimum daily contents, 137,300 acre-ft, Jan. 1, elevation, 556.89 ft.

02401620 H. NEELY HENRY RESERVOIR.--Lat 33°47'02", long 86°03'10", in N½ sec. 31, T. 14 S., R. 6 E., Calhoun County, Hydrologic Unit 03150106, at forebay of Henry Dam on Coosa River, near Ohatchee, and 16 mi south of Gadsden. DRAINAGE AREA, 6,596 mi^2. REVISED RECORDS, WDR AL-84-1: Drainage area. PERIOD OF RECORD, April 1966 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Alabama Power Co.).

Reservoir is formed by a compacted earth dam with a concrete gated spillway section. Spillway is equipped with six taintor gates 40 ft wide by 29 ft high. Storage began Feb. 23, 1966. Total capacity at elevation 508 ft is 120,850 acre-ft. Reservoir is used for power development and flood control. Gage-height record and capacity table furnished by Alabama Power Co.

EXTREMES FOR PERIOD OF RECORD: Maximum daily contents, 126,800 acre-ft, Oct. 19, 1966, elevation, 508.52 ft, minimum daily contents, 51,890 acre-ft, Apr. 2, 1966, elevation, 499.88 ft.

EXTREMES FOR CURRENT YEAR: Maximum daily contents, 122,400 acre-ft, July 8, elevation, 508.14 ft; minimum daily contents, 69,400 acre-ft, Mar. 6, elevation, 502.46 ft.

02405200 LOGAN MARTIN RESERVOIR.--Lat 33°24'33", long 86°20'17", in NW¼ sec. 33, T. 18 S., R. 3 E., St. Clair County, Hydrologic Unit 03150106, at Logan Martin Dam on Coosa River, 2 mi upstream from Kelly Creek, and 10 mi north of Childersburg, Ala. DRAINAGE AREA, 7,743 mi^2. REVISED RECORDS, WDR AL-84-1: Drainage area. PERIOD OF RECORD, July 1964 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by a compacted earth dam with gated concrete spillway section. Spillway is equipped with six taintor gates 40 ft wide by 38 ft high and one stoney-type trash gage 20 ft wide by 22.5 ft high. Storage began June 21, 1964. Total capacity at elevation 465 ft (top of power pool) is 273,300 acre-ft of which 142,107 acre-ft is usable storage above elevation 452.5 ft (minimum pool). Reservoir is used for power development and flood control. Gage-height record and capacity tables furnished by Alabama Power Co.

EXTREMES FOR PERIOD OF RECORD: Maximum daily contents, 475,800 acre-ft, Apr. 6, 1977, elevation, 475.31 ft; minimum daily contents, 186,100 acre-ft, Oct. 17, 1972, elevation, 458.27 ft.

EXTREMES FOR CURRENT YEAR: Maximum daily contents, 319,400 acre-ft, June 21, elevation, 467.82 ft; minimum daily, 193,000 acre-ft, Feb. 27, elevation, 458.90 ft.

02407950 LAY LAKE.--Lat 32°57'54", long 86°31'03", in NE¼ sec. 24, T. 23 N., R. 15 E., Chilton County, Hydrologic Unit 03150107, at Lay Dam on Coosa River, 0.5 mi upstream from Page Creek, and 11 mi northeast of Clanton. DRAINAGE AREA, 9,053 mi^2. REVISED RECORDS, WDR AL-84-1: Drainage area. GAGE, water-stage recorder with remote indicating gages. Prior to May 14, 1968, staff gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Alabama Power Co.). Prior to Jan. 1, 1966, at old Coosa River datum, 37.9 ft lower.

Reservoir is formed by a concrete gravity-type dam equipped with 26 radial gates 30 ft wide by 17 ft high. The pool was filled on Jan. 4, 1968. Total capacity at elevation 396.0 ft (top of gates) is 262,774 acre-ft, of which 117,780 acre-ft is controlled storage above elevation 382.0 ft (minimum pool). Prior to May 14, 1968, reservoir was formed by a concrete gravity-type dam, completed April 1914. Dam was equipped with 26 vertical lift gates 30 ft wide by 14 ft high. Total capacity at elevation 382.0 ft was 144,994 acre-ft. Reservoir is used for power development. Gage-height record and capacity table furnished by Alabama Power Co.

RESERVOIRS IN MOBILE RIVER BASIN--Continued

02409400 MITCHELL LAKE.--Lat 32°48'30", long 86°26'30", in NE¼ sec. 15, T. 21 N., R. 16 E., Chilton County, Hydrologic Unit 03150107, at Mitchell Dam on Coosa River, 5 mi downstream from Hatchet Creek, and 11 mi southeast of Clanton, Ala. DRAINAGE AREA, 9,778 mi^2. REVISED RECORDS, WDR AL-84-1: Drainage area. GAGE, staff gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Alabama Power Co.). Prior to Jan. 1, 1966, at old Coosa River datum, 38.08 ft lower.

Reservoir is formed by concrete gravity-type dam, completed August 1923, equipped with 26 radial gates 30 ft wide and 15 ft high. Total storage at elevation 311.9 ft (top of power pool) is 172,000 acre-ft, of which 33,300 acre-ft is usable storage above elevation 305.9 ft. Reservoir is used for power development. Gage-height record and capacity table furnished by Alabama Power Co.

02410400 JORDAN LAKE.--Lat 32°37'07", long 86°15'19", in N½ sec. 22, T. 19 N., R. 18 E., Elmore County, Hydrologic Unit 03150107, at Jordan Dam on Coosa River, 4 mi upstream from Pigeonroost Creek, and 5 mi northwest of Wetumpka, Ala. DRAINAGE AREA, 10,102 mi^2. REVISED RECORDS, WDR AL-84-1: Drainage area. GAGE, water-stage recorder with remote indicating gages. Prior to February 1967, staff gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Alabama Power Co.). Prior to Jan. 1, 1966, at old Coosa River datum 38.0 ft lower.

Reservoir, completed January 1929, is formed by a concrete arch-type dam equipped with 17 taintor gates 30 ft wide by 18 ft high and 18 taintor gates 34 ft wide and 8.1 ft high. Prior to Mar. 25, 1967, the dam was equipped with 17 radial gates 30 ft wide by 18 ft high and 642 ft open-crest spillway.

Bouldin Hydro Plant (completed February 1967, failed Feb. 9, 1975).--Lat 32°34'58", long 86°17'02", in SE¼ sec. 32, T. 19 N., R. 18 E., Elmore County, also utilizes the water from Jordan Reservoir through a canal approximately 1 mi north of Jordan Dam joining the Bouldin Hydro Plant forebay with Jordan Reservoir. The discharge from Bouldin Hydro Plant flows through a 4.5 mi canal to the Coosa River at approximately 7 mi downstream from Wetumpka. There are no facilities at Bouldin Hydro Plant for releasing hydraulic flows in excess of generating capabilities of Jordan and Bouldin Hydro Plants. Total storage at elevation 252.0 ft is 236,200 acre-ft, of which 58,000 acre-ft is usable storage above elevation 242.0 ft. Reservoir is used for power development. Gage-height record and storage tables furnished by Alabama Power Co.

02417500 LAKE MARTIN.--Lat 32°40'41", long 85°54'30", in sec. 36, T. 20 N., R. 21 E., Tallapoosa County, Hydrologic Unit 03150109, at forebay of Martin Dam on Tallapoosa River, 5 mi upstream from Sougahatchee Creek, and 10 mi north of Tallassee, Ala. DRAINAGE AREA, 2,984 mi^2. REVISED RECORDS, WDR AL-84-1: Drainage area. PERIOD OF RECORD, October 1927 to current year. GAGE, remote indicating gage referenced to wire weight gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Alabama Power Co.), adjustment unknown.

Lake is formed by a combination arch and gravity concrete dam with a riprap earth embankment on left or east end. Spillway is equipped with 20 modified stoney-type gates, 30 ft wide and 16 ft high. Storage began in the summer of 1926, and the powerhouse was completed in the summer of 1927. Total capacity at elevation 490.00 ft (top of gates) is 1,622,000 acre-ft, of which 1,375,000 acre-ft is controlled storage above elevation 430.00 ft (minimum pool). Lake is used for power development. Gage-height record and capacity table furnished by Alabama Power Co.

EXTREMES FOR PERIOD OF RECORD: Maximum daily contents since Oct. 1, 1940, 1,648,900 acre-ft, Apr. 14, 1979, elevation, 490.69 ft; minimum daily, 555,000 acre-ft, June 29, 1941, elevation 452.12 ft.

EXTREMES FOR CURRENT YEAR: Maximum daily contents, 1,637,600 acre-ft, June 19, elevation, 490.39 ft; minimum daily, 1,246,700 acre-ft, Jan. 30, elevation, 479.60 ft.

02451950 LEWIS SMITH RESERVOIR.--Lat 33°56'26", long 87°06'28", in W½ sec. 6, T. 13 S., R. 5 W., Walker County, Hydrologic Unit 03160110, at forebay of Lewis Smith Dam on Sipsey Fork of Mulberry Fork of Black Warrior River, 1.2 mi downstream from Ryan Creek, 2.5 mi upstream from Mill Creek, 2.5 mi upstream from State Highway 69, 14 mi northwest of Jasper, and at mile 13.5. DRAINAGE AREA, 945 mi^2. PERIOD OF RECORD, October 1960 to current year. GAGE, water-stage recorder with remote indicating gages. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Alabama Power Co.), adjustment unknown.

Reservoir is formed by an earth and rock-fill dam 300 ft high and 2,200 ft long with fixed crest spill-way 956 ft long. Storage began Oct. 3, 1960. Capacity at elevation 522 ft (crest of spillway) is 1,670,700 acre-ft. Storage of 394,000 acre-ft is provided between elevations of 488 ft and 510 ft for power generation. Approximately 281,000 acre-ft of storage for flood control is provided between elevations of 510 ft and 522 ft. Reservoir is used for power development and flood control. Gage-height record and capacity table furnished by the Alabama Power Co.

EXTREMES FOR PERIOD OF RECORD: Maximum daily contents, 1,649,500 acre-ft, Mar. 19, 1973, elevation, 521.17 ft; minimum daily since reservoir was filled to elevation 510.00 ft operating pool (Jan. 6, 1962), 1,008,400 acre-ft, Dec. 2, 1971, elevation, 488.84 ft.

EXTREMES FOR CURRENT YEAR: Maximum daily contents, 1,517,800 acre-ft, March 7, elevation, 515.75 ft; minimum daily, 1,155,900 acre-ft, Dec. 23, elevation, 497.87 ft.

02413950 HARRIS RESERVOIR.--Lat 33°15'37", long 85°37'00", in NW¼ sec. 28, T. 20 S., R. 10 E., Randolph County, Hydrologic Unit 03150109, formed by Harris Dam constructed across the Tallapoosa River, 0.8 mi upstream of Crooked Creek, and 7 mi west of Wedowee. DRAINAGE AREA, 1,453 mi^2, approximately. PERIOD OF RECORD, April 1983 to current year.
GAGE, remote water stage recorder and indicating gages, referenced to vertical staff gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Alabama Power Company).

Reservoir is formed by a compacted earth dam with a concrete gated spillway section. Spillway is equipped with six radial gates 40 ft wide and 40.4 ft high. Storage began Oct. 27, 1982. Surface area at elevation 793.0 ft (top of power pool) is 10,660 acres. Total storage at elevation 793.0 ft is 425,700 acre-ft of which 207,300 acre-ft is usable storage above elevation 768.0 ft. Reservoir is used for power development and flood control. Gage height and capacity table furnished by Alabama Power Company.

EXTREMES FOR PERIOD OF RECORD: Maximum daily contents, 431,400 acre-ft, Aug. 2, 1984, elevation, 793.53 ft; minimum daily contents, 316,300 acre-ft, Oct. 4, 6-9, 1986, elevation, 781.44 ft.

EXTREMES FOR CURRENT YEAR: Maximum daily contents, 428,400 acre-ft, June 20, elevation, 793.25 ft; minimum daily, 337,300 acre-ft, Dec. 19, elevation 783.89 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

Date	Elevation (feet)	Contents (acre-ft)	Change in contents (acre-ft)	Elevation (feet)	Contents (acre-ft)	Change in contents (acre-ft)
02393500 ALLATOONA RESERVOIR				02399499 WEISS LAKE		
Sept. 30	829.45	256,800	....	562.56	265,000	....
Oct. 31	829.78	259,900	+3,100	561.36	233,400	-31,600
Nov. 30	829.23	254,800	-5,100	559.82	196,500	-36,900
Dec. 31	826.45	230,400	-24,400	557.34	145,500	-51,000
CAL YR 1988	......	....	+20,100	....	....	-20,700
Jan. 31	827.89	242,800	+12,400	559.19	182,500	+37,000
Feb. 28	834.36	304,800	+62,000	562.73	269,700	+87,200
Mar. 31	838.38	348,600	+43,800	562.43	261,500	-8,200
Apr. 30	839.90	366,300	+17,700	564.21	312,700	+51,200
May 31	841.02	379,700	+13,400	563.90	303,400	-9,300
June 30	844.92	429,200	+49,500	563.70	297,400	-6,000
July 31	841.20	381,900	-47,300	563.83	301,300	+3,900
Aug. 31	839.81	365,200	-16,700	563.68	296,900	-4,400
Sept. 30	843.35	408,800	+43,600	563.26	284,700	-12,200
WTR YR 1989	......	....	+152,000	......	....	+19,700
02401620 H. NEELY HENRY RESERVOIR				02405200 LOGAN MARTIN RESERVOIR		
Sept. 30	507.78	118,400	....	464.77	269,800	....
Oct. 31	507.39	114,200	-4,200	462.28	234,500	-35,300
Nov. 30	504.93	89,800	-24,400	460.71	214,300	-20,200
Dec. 31	503.82	80,200	-9,600	459.70	202,200	-12,100
CAL YR 1988	......	....	-4,600	......	....	-1,800
Jan. 31	504.33	84,500	+4,300	459.78	203,100	+900
Feb. 28	502.60	70,500	-14,000	460.60	213,000	+9,900
Mar. 31	504.63	87,200	+16,700	460.95	217,300	+4,300
Apr. 30	507.98	120,600	+33,400	464.64	267,900	+50,600
May 31	507.80	118,600	-2,000	464.85	271,000	+3,100
June 30	506.86	108,500	-10,100	464.62	267,600	-3,400
July 31	507.78	118,400	+9,900	465.06	274,200	+6,600
Aug. 31	507.54	115,800	-2,600	465.17	275,900	+1,700
Sept. 30	506.92	109,200	-6,600	464.16	260,700	-15,200
WTR YR 1989	......	....	-9,200	......	....	-9,100
COMBINED LAY, MITCHELL, AND JORDAN LAKES				02417500 LAKE MARTIN		
Sept. 30	......	639,000	....	487.86	1,539,800	....
Oct. 31	......	645,700	+6,700	485.48	1,451,300	-88,500
Nov. 30	......	662,700	+17,000	482.17	1,333,600	-117,700
Dec. 31	......	668,600	+5,900	479.96	1,258,700	-74,900
CAL YR 1988	......	....	+7,600	......	....	+13,600
Jan. 31	......	659,100	-9,500	479.61	1,247,100	-11,600
Feb. 28	......	657,500	-1,600	482.47	1,344,000	+96,900
Mar. 31	......	673,400	+15,900	487.76	1,536,100	+192,100
Apr. 30	......	668,100	-5,300	489.32	1,595,800	+58,300
May 31	......	660,300	-7,800	489.46	1,601,300	+5,500
June 30	......	662,300	+2,000	489.48	1,602,000	+700
July 31	......	660,800	-1,500	489.48	1,602,000	0
Aug. 31	......	666,500	+5,700	488.82	1,576,500	-25,500
Sept. 30	......	658,200	-8,300	486.85	1,501,800	-74,700
WTR YR 1989	......	....	+19,200	......	....	-38,000
02451950 LEWIS SMITH RESERVOIR				02413950 HARRIS RESERVOIR		
Sept. 30	500.96	1,211,300	....	791.91	414,200	....
Oct. 31	499.41	1,183,200	-28,100	788.62	381,100	-33,100
Nov. 30	502.32	1,236,600	+53,400	784.90	346,300	-34,800
Dec. 31	499.74	1,189,100	-47,500	784.26	340,600	-5,700
CAL YR 1988	......	....	+61,500	......	....	+1,700
Jan. 31	509.11	1,371,300	+182,200	784.04	338,600	-2,000
Feb. 28	513.71	1,471,100	+99,800	784.61	343,700	+5,100
Mar. 31	509.22	1,373,600	-97,500	787.79	373,100	+29,400
Apr. 30	509.31	1,375,400	+1,800	792.83	423,900	+50,800
May 31	509.84	1,386,600	+11,200	792.40	419,400	-4,500
June 30	509.98	1,389,600	+3,000	791.77	412,800	-6,600
July 31	509.01	1,369,200	-20,400	792.34	418,700	+5,900
Aug. 31	504.40	1,276,300	-92,900	791.30	407,900	-10,800
Sept. 30	502.72	1,244,100	-32,200	791.98	415,000	+7,100
WTR YR 1989	......	....	+32,800	......	....	+800

02479431 POND CREEK NEAR DEER PARK, AL

LOCATION.--Lat 31°09'39", long 88°21'43', in SW¼SW¼ sec. 2, T. 2 N., R. 4 W., Washington County, Hydrologic Unit 03170008, near right bank on downstream side of bridge on county road 9, 1.3 mi upstream from mouth, and 5 mi southwest of Deer Park.

DRAINAGE AREA.--20.4 mi^2.

PERIOD OF RECORD.--October 1976 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 128 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--13 years, 37.6 ft^3/s, 25.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.-- Maximum discharge, 3,780 ft^3/s, Apr. 7, 1983, gage height, 21.00 ft (from high water marks); minimum, 0.05 ft^3/s, June 19, 20, 1988.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 30	1200	578	7.01
May 19	1815	481	6.33
June 8	2315	*767	*8.21

Minimum discharge, 0.40 ft^3/s, Sept. 18-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	5.0	11	23	15	17	75	37	2.9	280	86	3.2
2	47	4.6	8.8	19	11	40	40	34	10	205	54	2.4
3	174	4.2	7.4	16	8.8	91	26	20	38	318	24	1.9
4	148	4.1	6.8	12	7.3	87	36	11	14	133	14	1.5
5	66	5.9	6.3	10	6.9	48	191	14	10	85	8.8	1.2
6	25	5.6	5.9	8.9	7.6	37	123	13	20	60	6.1	1.0
7	13	5.9	5.8	8.2	8.2	28	65	8.9	19	42	4.6	.87
8	8.4	5.5	6.1	7.5	7.8	19	34	5.6	337	59	3.6	.73
9	6.2	5.2	6.7	6.4	6.8	14	25	4.3	402	75	2.9	.65
10	5.5	5.0	6.8	6.4	5.9	11	33	3.9	123	87	2.4	.60
11	5.3	5.0	22	7.9	5.5	8.3	41	3.5	59	55	2.2	.57
12	4.8	5.6	37	15	5.2	6.7	34	2.8	28	26	2.0	.57
13	4.0	24	34	41	5.0	5.5	22	2.5	17	20	1.7	.51
14	3.4	30	21	61	5.1	4.9	16	3.2	29	22	1.6	.49
15	3.0	27	15	70	4.9	4.5	14	6.9	146	19	2.1	.48
16	2.7	23	13	59	4.6	4.3	12	13	149	20	2.0	.47
17	2.5	55	13	33	4.3	4.1	9.8	9.0	98	19	1.8	.45
18	2.4	74	12	19	4.6	3.6	7.8	5.4	42	13	1.6	.44
19	2.4	37	10	15	6.8	3.2	6.4	122	23	14	1.4	.43
20	2.4	72	9.5	35	9.6	4.3	6.7	255	17	13	1.2	.42
21	2.5	83	9.1	52	21	36	6.5	188	13	8.6	1.0	.42
22	3.0	50	8.8	39	23	63	5.2	120	14	16	.95	.41
23	3.6	23	10	21	17	170	4.2	74	20	44	1.2	.41
24	3.7	15	21	15	11	188	3.5	169	21	80	2.8	.42
25	3.2	11	35	12	8.7	87	2.9	127	21	68	3.7	.48
26	2.8	10	32	10	7.6	47	2.5	58	22	31	2.4	.54
27	2.7	14	20	9.2	7.0	27	2.0	23	13	20	1.7	.54
28	2.5	23	16	8.2	13	18	5.1	13	21	38	1.3	.65
29	2.6	21	14	7.4	---	29	25	7.9	59	87	1.9	.94
30	3.2	15	14	8.3	---	328	33	5.4	82	51	3.5	3.0
31	4.3	---	18	14	---	140	---	3.8	---	65	3.8	---
TOTAL	578.1	668.6	456.0	669.4	249.2	1574.4	907.6	1364.1	1869.9	2123.6	248.25	26.69
MEAN	18.6	22.3	14.7	21.6	8.90	50.8	30.3	44.0	62.3	68.5	8.01	.89
MAX	174	83	37	70	23	328	191	255	402	318	86	3.2
MIN	2.4	4.1	5.8	6.4	4.3	3.2	2.0	2.5	2.9	8.6	.95	.41
CFSM	.91	1.09	.72	1.06	.44	2.49	1.48	2.16	3.06	3.36	.39	.04
IN.	1.05	1.22	.83	1.22	.45	2.87	1.66	2.49	3.41	3.87	.45	.05

CAL YR 1988 TOTAL 9097.03 MEAN 24.9 MAX 680 MIN .06 CFSM 1.22 IN. 16.59
WTR YR 1989 TOTAL 10735.84 MEAN 29.4 MAX 402 MIN .41 CFSM 1.44 IN. 19.58

02479560 ESCATAWPA RIVER NEAR AGRICOLA, MS
(National stream-quality accounting station)

LOCATION.--Lat 30°48'32", long 88°27'41", in SW¼SW¼ sec. 2, T. 3 S., R. 5 W., George County, MS, Hydrologic Unit 03170008, near left bank on downstream side of bridge on county road 612, 2.5 mi west of Alabama-Mississippi State line, 3.7 mi east of Agricola, Miss., 4.8 mi downstream of old gage at Escatawpa River near Wilmer, Ala, 6.7 mi west of Wilmer, and 50.6 mi upstream from mouth.

DRAINAGE AREA.--562 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1973 to current year.

REVISED RECORD.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Water-discharge records good.

AVERAGE DISCHARGE.--16 years, 1,204 ft^3/s, 29.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,700 ft^3/s, Apr. 9, 1983, gage height, 22.39 ft; minimum, 100 ft^3/s, June 8, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929 reached an elevation of 72.0 ft ± 1.0 ft, National Geodetic Vertical datum of 1929, as determined from historical data. Peak discharge of this flood is unknown but in all probability has not been exceeded since 1929.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 21	1900	*5,620	*15.09				

Minimum discharge, 152 ft^3/s, Sept. 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	971	295	968	849	436	465	3550	1350	453	1530	1160	312
2	1420	295	1320	780	504	621	4460	1370	394	2360	1140	306
3	2240	300	1160	716	483	1570	4570	1010	511	3870	874	227
4	2770	312	908	678	424	1770	2820	830	821	4840	692	196
5	2820	405	727	650	395	1600	2200	781	646	4470	587	187
6	2720	385	612	665	385	1470	3050	735	725	3630	514	197
7	1940	340	531	731	376	1350	2510	588	651	2510	450	199
8	1360	333	469	706	367	1190	1690	488	1170	1830	400	189
9	1060	324	435	596	359	1040	1290	407	3870	1920	385	215
10	860	307	417	498	354	854	1250	354	4680	1410	337	354
11	713	354	574	444	346	686	1220	331	3190	1100	310	276
12	595	400	788	435	338	563	1110	285	2130	833	287	340
13	519	634	816	671	326	467	1110	254	1590	659	284	278
14	473	764	796	1050	321	400	1300	267	1300	658	268	224
15	441	743	736	1240	311	360	1180	331	2190	864	253	200
16	418	752	690	1240	300	355	971	446	3590	799	249	191
17	401	1120	645	1120	292	365	797	412	3990	674	239	181
18	386	1100	586	1190	303	369	656	336	2600	688	227	171
19	372	1170	551	1320	312	332	542	491	1760	1690	227	163
20	364	1550	531	1380	332	303	518	2620	1530	938	245	159
21	356	1990	514	1470	542	729	446	5270	1280	686	252	156
22	346	1890	494	1310	703	2150	393	4890	961	679	226	154
23	332	2190	478	1110	668	2520	372	3100	870	1410	214	152
24	342	2230	467	952	572	3160	362	2820	821	1740	204	153
25	347	1740	679	827	499	3270	335	3080	852	1370	199	160
26	314	1260	774	718	458	3230	308	2500	738	1050	192	176
27	306	980	727	629	424	2740	280	1920	665	894	187	189
28	301	850	642	552	405	1980	256	1340	714	864	219	204
29	297	787	603	485	---	1450	583	912	656	1070	331	252
30	296	770	578	441	---	1640	929	687	1060	1250	286	368
31	293	---	827	420	---	2670	---	555	---	1070	263	---
TOTAL	26373	26570	21043	25873	11535	41669	41058	40760	46408	49356	11701	6529
MEAN	851	886	679	835	412	1344	1369	1315	1547	1592	377	218
MAX	2820	2230	1320	1470	703	3270	4570	5270	4680	4840	1160	368
MIN	293	295	417	420	292	303	256	254	394	658	187	152
CFSM	1.51	1.58	1.21	1.49	.73	2.39	2.44	2.34	2.75	2.83	.67	.39
IN.	1.75	1.76	1.39	1.71	.76	2.76	2.72	2.70	3.07	3.27	.77	.43

CAL YR 1988 TOTAL 339157 MEAN 927 MAX 6540 MIN 106 CFSM 1.65 IN. 22.45
WTR YR 1989 TOTAL 348875 MEAN 956 MAX 5270 MIN 152 CFSM 1.70 IN. 23.09

02479560 ESCATAWPA RIVER NEAR AGRICOLA, MS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1979 to September 1986.
WATER TEMPERATURES: October 1979 to September 1986.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 134 microsiemens, June 15, 1985; minimum, 9 microsiemens, Apr. 16, Aug. 13, 14, 1984.
WATER TEMPERATURES: Maximum, 32.0°C, July 14-15, 1980, July 15-17, 23, 24, 1981; minimum, 2.5°C Jan.22-23, 1985.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
05...	0738	2920	24	--	--	19.5	--	--	--	--	--	--
18...	1430	386	28	26	5.40	17.0	2.8	754	8.7	91	44	32
NOV												
16...	0734	715	28	--	--	19.0	--	--	--	--	--	--
JAN												
05...	0815	612	29	--	--	--	--	--	--	--	--	--
FEB												
21...	1400	607	19	28	5.20	15.0	18	756	9.2	92	1000	590
MAR												
02...	0805	511	28	--	--	12.5	--	--	--	--	--	--
APR												
11...	1415	1220	25	25	4.60	14.0	7.6	765	10.0	97	41	26
MAY												
25...	0847	3180	26	--	--	16.5	--	--	--	--	--	--
JUL												
13...	0912	669	26	--	--	28.0	--	--	--	--	--	--
AUG												
15...	1500	248	29	28	5.60	27.0	2.9	756	6.7	85	55	29
24...	0813	204	28	--	--	26.5	--	--	--	--	--	

DATE	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3
OCT											
18...	5	3	0.92	0.73	2.3	46	0.4	0.50	0	2	2
FEB											
21...	6	4	1.2	.78	2.5	44	.4	.60	0	2	2
APR											
11...	5	4	.95	.58	2.0	45	.4	.50	0	1	1
AUG											
15...	5	2	.94	.69	2.2	46	.4	.40	0	3	2

DATE	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
OCT											
18...	6.20	2	4.4	4.3	<.10	9.2	32	25	0.04	33.4	<.010
FEB											
21...	7.00	2	7.5	5.3	.10	7.7	44	29	.06	72.1	<.010
APR											
11...	5.40	0	1.9	3.8	.10	6.7	46	18	.06	152	<.010
AUG											
15...	6.80	3	2.0	4.3	<.10	8.7	35	22	.05	23.4	<.010

02479560 ESCATAWPA RIVER NEAR AGRICOLA, MS--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
OCT 18...	0.170	0.010	<.010	0.49	0.50	<.010	<.010	<.010	--	--	60
FEB 21...	.160	.020	.020	.88	.90	.020	.020	.010	0.02	0.01	190
APR 11...	<.100	.010	.020	.49	.50	.020	.010	<.010	.02	.01	250
AUG 15...	.170	.020	.030	.28	.30	<.010	<.010	<.010	--	--	50

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 18...	<1	30	<.5	1	<1	<3	1	110	<5	<4	33
FEB 21...	<1	28	<.5	2	1	<3	3	630	<5	<4	52
APR 11...	<1	41	<.5	<1	1	<3	4	570	<5	<4	61
AUG 15...	<1	28	<.5	<1	<1	<3	<1	100	<1	<4	26

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 18...	<.1	<10	3	<1	<1.0	16	<6	7	1	0.78	--
FEB 21...	<.1	<10	<1	<1	<1.0	16	<6	110	39	64	76
APR 11...	<.1	<10	2	<1	<1.0	13	<6	18	16	53	5
AUG 15...	.2	<10	<1	<1	<1.0	16	<6	18	7	4.7	92

03572110 CROW CREEK AT BASS, AL

LOCATION.--Lat 34°56'03", long 85°55'03", in SE¼NE¼NW¼ sec. 20, T. 1 S., R. 7 E., Jackson County, Hydrologic Unit 06030001, on downstream side of bridge on State Highway 117, 0.3 mi northwest of Bass, 1 mi upstream from Bennett Cove Creek, 3.7 mi south of Alabama-Tennessee State line, and 15.8 mi upstream from mouth.

DRAINAGE AREA.--131 mi².

PERIOD OF RECORD.--May 1975 to current year.

REVISED RECORDS.--1975-80, 1982-84 (P).

GAGE.--Water-stage recorder. Elevation of gage is 598.76 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: June 9 to July 17. Records good except for periods of estimated record, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--14 years, 272 ft³/s, 28.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s, Mar. 21, 1980, gage height, 17.17 ft; minimum, 1.9 ft³/s, Nov. 15, 16, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 21	1300	5,070	14.27	Apr. 4	1900	4,580	13.89
Mar. 6	0930	7,030	15.36	June 15	2130	*8,380	*15.88a

Minimum discharge, 11 ft³/s, Oct. 26-28.

a - from highwater mark

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	15	253	1530	227	961	593	82	49	e200	74	48
2	220	15	203	773	201	650	460	81	46	e500	63	224
3	110	16	167	538	182	497	423	77	44	e2500	55	90
4	67	82	146	407	164	433	3120	73	44	e1000	49	55
5	49	919	129	316	219	1970	2160	301	268	e2000	43	42
6	41	359	116	404	709	5500	955	505	677	e800	39	35
7	35	200	108	371	631	1710	1560	258	422	e1000	37	31
8	31	143	100	1060	466	860	1260	188	236	e2000	36	27
9	28	114	92	776	368	551	1020	159	e180	e900	33	25
10	25	99	86	567	308	434	704	437	e350	e500	29	22
11	22	86	82	1400	271	359	527	264	e150	e300	27	29
12	20	77	78	2550	239	302	420	204	e110	e500	25	63
13	18	82	74	2980	211	263	345	163	e450	e350	24	217
14	16	96	71	1570	339	236	288	133	e700	e250	22	2320
15	16	84	67	1100	687	212	261	118	e6000	e200	20	1320
16	15	82	63	772	442	193	234	102	e2500	e160	23	586
17	14	136	60	566	986	176	200	88	e1000	e135	26	303
18	13	126	59	440	1950	169	180	77	e550	103	30	204
19	16	236	56	353	1170	175	167	70	e1300	175	32	145
20	15	1230	55	289	761	357	153	172	e800	338	26	111
21	15	641	56	243	3690	642	142	201	e650	175	21	88
22	15	365	88	211	1710	505	133	113	e1300	123	19	79
23	14	255	438	189	817	482	124	111	e700	101	25	86
24	13	198	526	170	572	700	117	105	e400	92	31	80
25	12	160	551	152	451	462	108	82	e300	82	82	194
26	12	144	337	143	384	378	102	70	e200	74	47	350
27	12	1340	258	146	969	313	97	132	e160	86	110	201
28	13	758	328	142	2010	273	90	109	e140	69	54	141
29	13	467	384	133	---	254	86	76	e400	63	37	381
30	14	336	406	280	---	757	83	63	e250	55	30	1590
31	14	---	1130	284	---	828	---	55	---	78	26	---
TOTAL	947	8861	6567	20855	21134	21602	16112	4669	20376	14909	1195	9087
MEAN	30.5	295	212	673	755	697	537	151	679	481	38.5	303
MAX	220	1340	1130	2980	3690	5500	3120	505	6000	2500	110	2320
MIN	12	15	55	133	164	169	83	55	44	55	19	22

CAL YR 1988 TOTAL 61600.2 MEAN 168 MAX 7530 MIN 5.4
WTR YR 1989 TOTAL 146314 MEAN 401 MAX 6000 MIN 12

e Estimated

03574500 PAINT ROCK RIVER NEAR WOODVILLE, AL

LOCATION.--Lat 34°37'27", long 86°18'23", in NW¼ sec. 10, T. 5 S., R. 3 E., Jackson County, Hydrologic Unit 06030002, on downstream side of bridge on U.S. Highway 72, 1,000 ft downstream from Southern Railway bridge, 2 mi west of Woodville, 4.1 mi upstream from Little Paint Creek, and at mile 26.6.

DRAINAGE AREA.--320 mi².

PERIOD OF RECORD.--December 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 570.95 ft above National Geodetic Vertical Datum of 1929. Dec. 23, 1935, to Jan. 16, 1938, nonrecording gage at same site.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--53 years (water years 1937-89), 676 ft³/s, 28.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,200 ft³/s, Mar. 16, 1973, gage height, 24.40 ft; minimum, 1.3 ft³/s, Oct. 21, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 13	2400	7,460	17.77	Apr. 5	2300	*7,780	*17.85
Mar. 7	0500	7,550	17.79				

Minimum discharge, 35 ft³/s, Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	111	766	3890	900	4850	1810	166	99	725	104	59
2	942	102	600	3970	739	2900	1330	159	101	833	95	82
3	900	95	499	2790	640	1780	1030	153	93	2530	92	112
4	463	128	438	1940	570	1250	2080	147	88	3630	120	134
5	336	1840	385	1300	636	2350	5500	305	94	3380	113	84
6	264	2440	346	1130	1710	4610	5600	1110	482	2330	86	65
7	221	1070	319	1210	2230	6450	3280	566	1000	1250	78	56
8	191	573	296	2400	1590	3350	3310	346	468	802	70	50
9	163	446	272	3500	1150	1920	3140	280	365	627	66	45
10	143	378	253	2660	923	1250	2300	294	412	482	64	42
11	129	367	238	2230	803	919	1350	410	301	552	60	40
12	116	323	224	3690	705	787	924	279	228	840	56	36
13	104	413	210	6540	624	676	748	228	530	645	55	217
14	93	522	200	6890	567	617	634	203	785	477	51	164
15	85	436	191	4480	1390	565	578	185	3010	382	49	248
16	80	377	179	3050	1140	541	529	174	3940	334	51	282
17	75	452	168	2010	923	501	461	158	2760	338	105	179
18	72	494	161	1400	2130	471	413	143	1320	281	67	128
19	78	514	155	1010	2800	448	378	131	1130	241	68	94
20	92	2510	154	827	2010	570	348	128	1660	241	62	77
21	115	3380	147	696	3240	1630	321	173	2430	244	53	65
22	107	2310	174	609	4940	1550	296	215	2650	211	47	58
23	99	1020	825	550	3980	1170	273	181	1980	182	44	56
24	91	644	1910	502	2110	1570	254	241	1170	163	41	61
25	83	519	1870	458	1360	1280	235	185	778	156	38	72
26	79	458	1290	427	979	1000	218	150	559	145	68	136
27	75	2430	872	484	1430	839	202	137	436	131	99	307
28	77	3500	811	517	4300	723	189	193	429	127	94	209
29	87	2560	1420	477	---	649	177	157	744	144	114	232
30	109	1250	1210	940	---	997	172	129	507	150	77	747
31	115	---	2940	1310	---	1850	---	109	---	119	66	---
TOTAL	5688	31662	19523	63887	46519	50063	38080	7435	30549	22692	2253	4137
MEAN	183	1055	630	2061	1661	1615	1269	240	1018	732	72.7	138
MAX	942	3500	2940	6890	4940	6450	5600	1110	3940	3630	120	747
MIN	72	95	147	427	567	448	172	109	88	119	38	36
CFSM	.57	3.30	1.97	6.44	5.19	5.05	3.97	.75	3.18	2.29	.23	.43
IN.	.66	3.68	2.27	7.43	5.41	5.82	4.43	.86	3.55	2.64	.26	.48

CAL YR 1988 TOTAL 168029 MEAN 459 MAX 10200 MIN 13 CFSM 1.43 IN. 19.53
WTR YR 1989 TOTAL 322488 MEAN 884 MAX 6890 MIN 36 CFSM 2.76 IN. 37.49

03575000 FLINT RIVER NEAR CHASE, AL

LOCATION.--Lat 34°49'22", long 86°28'59", in NW¼NW¼ sec. 36, T. 2 S., R. 1 E., Madison County, Hydrologic Unit 06030002, on left bank downstream side of bridge on Winchester Road, 400 ft downstream from Brier Fork, 1,100 ft upstream from L & N Railroad bridge, 4.3 mi northeast of Chase, and at mile 36.2.

DRAINAGE AREA.--342 mi^2.

PERIOD OF RECORD.--October 1929 to September 1981, October 1982 to current year. Prior to May 1930 monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area WSP 853: 1936 (M). WSP 1306: 1934 (M). WSP 1910: Peak discharge (base).

GAGE.--Water-stage recorder. Datum of gage is 640.37 ft above National Geodetic Vertical Datum of 1929. May 1934 to January 1975, water-stage recorder 0.2 mi downstream at same datum. Prior to May 1934, nonrecording gage 1,000 ft downstream at L & N Railroad bridge at same datum.

REMARKS.--Estimated daily discharges: Jan. 30 to Feb. 1, May 24-26, June 9-16. Records good except those for periods of estimated discharges, which are poor. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--59 years (water years 1930-81, 1983-89), 552 ft^3/s, 21.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 104,000 ft^3/s, Mar. 16, 1973, gage height, 29.52 ft; minimum, 44 ft^3/s, Sept. 20, 27, 30, 1931; minimum gage height, 0.82 ft, Sept. 3, 27, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1929 reached a stage of 25.0 ft from floodmarks, discharge, 58,500 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 12	0730	9,670	12.19	June 9	1515	15,700	15.54
Feb. 18	0915	6,880	10.08	June 15	unknown	10,100	12.50
Feb. 21	1930	13,000	14.24	June 19	1530	9,660	12.18
Mar. 6	0430	*26,000	*19.22	July 12	0330	11,400	13.34
Apr. 4	2130	10,500	12.78				

Minimum discharge, 71 ft^3/s, Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	99	345	3800	e550	1750	821	324	166	1100	250	137
2	346	96	387	1410	460	1200	615	305	191	2140	278	192
3	209	95	346	1130	421	999	679	279	295	2560	265	141
4	143	105	318	853	437	1530	6650	270	237	1130	258	143
5	116	971	287	661	564	7230	5180	687	805	2300	220	146
6	103	455	268	906	1310	16000	1560	955	2830	1080	230	136
7	97	271	254	819	1070	2510	2970	452	1270	685	341	131
8	89	208	241	2550	800	1450	2240	354	1110	559	248	128
9	88	176	230	1530	691	1110	1760	328	e10700	484	209	125
10	87	162	230	981	586	934	1080	359	e5400	432	191	126
11	84	149	225	3760	550	826	850	327	e2200	2360	180	177
12	79	140	212	9250	521	743	729	280	e1700	5970	173	189
13	77	179	203	8720	485	678	651	256	e1400	1200	167	174
14	75	208	195	3850	884	636	586	246	e1200	820	163	2170
15	74	173	187	2960	1560	586	596	248	e8000	596	162	844
16	74	166	179	1780	933	601	565	237	e4000	516	160	429
17	74	209	172	1250	2510	547	499	224	1430	507	163	315
18	80	217	167	1010	6350	517	455	216	888	417	161	251
19	113	384	164	861	3200	490	424	206	7230	382	157	214
20	99	2480	162	753	1710	935	398	353	3780	423	150	200
21	95	1170	179	654	7880	1060	372	465	1810	363	146	186
22	93	514	328	594	4020	755	353	290	1910	1490	137	186
23	93	379	1820	552	1550	728	339	349	1040	583	127	210
24	88	321	1370	518	1110	1060	324	e290	737	419	120	200
25	85	278	931	488	940	765	310	e250	611	442	167	621
26	86	406	570	465	872	642	301	e220	516	346	121	1140
27	82	3250	458	512	2070	576	293	238	677	298	103	528
28	99	1360	1140	483	4340	528	278	212	1790	277	98	377
29	105	751	1330	414	---	504	273	194	1660	257	81	650
30	109	454	869	e600	---	745	282	181	708	243	257	1410
31	102	---	2470	e1000	---	1100	---	173	---	244	284	---
TOTAL	3252	15826	16237	55114	48374	49735	32433	9768	66291	30623	5767	11876
MEAN	105	528	524	1778	1728	1604	1081	315	2210	988	186	396
MAX	346	3250	2470	9250	7880	16000	6650	955	10700	5970	341	2170
MIN	74	95	162	414	421	490	273	173	166	243	81	125

CAL YR 1988 TOTAL 115978 MEAN 317 MAX 8620 MIN 55
WTR YR 1989 TOTAL 345296 MEAN 946 MAX 16000 MIN 74

e Estimated

TENNESSEE RIVER MAIN STEM

03575500 TENNESSEE RIVER AT WHITESBURG, AL

LOCATION.--Lat 34°34'18", long 86°33'29", SW¼ sec. 29, T. 5 S., R. 1 E., Madison County, Hydrologic Unit 06030003, at Whitesburg, on right bank, 2,500 ft upstream from Aldridge Creek, 3,000 ft upstream from Clement C. Clay Bridge on U.S. Highway 231, 11.0 mi south of Huntsville, 15.1 mi downstream from Guntersville Dam, and at mile 333.9.

DRAINAGE AREA.--25,610 mi^2.

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only for some periods, published in WSP 1306. Prior to October 1936, published as "at Decatur." Gage-height records collected in this vicinity since 1875 (fragmentary prior to April 1909) are contained in files of U.S. Army Corps of Engineers and in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 549.00 ft above National Geodetic Vertical Datum of 1929. Oct 1, 1924, to Dec. 2, 1926, nonrecording gage, and Dec. 3, 1926, to Sept. 30, 1936, water-stage recorder, at site 28.3 mi downstream at datum 14.70 ft lower. Oct. 1, 1936, to Sept. 30, 1960, water-stage recorder 830 ft downstream at same datum. Since Mar. 4, 1937, auxiliary gage is 28.3 mi downstream.

REMARKS.--Estimated daily discharges: Oct. 20-26, Oct. 30 to Nov. 11, Nov. 23, 24, June 7, 22-27 and July 25 to Aug. 2. Records good except those for periods of estimated record and those below 20,000 ft^3/s, which are poor.

AVERAGE DISCHARGE.--65 years, 42,670 ft^3/s, 22.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 323,000 ft^3/s, Mar. 19, 1973, gage height, 26.06 ft; minimum daily, 400 ft^3/s, July 24, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 31.4 ft, in March 1867, present site and datum, from high-water profile by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 183,000 ft^3/s, gage height, unknown, June 23; minimum daily discharge, 6,690 ft^3/s, Oct. 1; minimum gage height, 1.60 ft, Dec. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6690	27000	49200	37600	28000	120000	29800	12800	39800	75900	52000	47400
2	8020	25000	48900	55800	24500	119000	16800	14500	32300	87800	52000	35500
3	21900	20000	14800	56400	44100	110000	31800	23700	26600	93000	48700	31900
4	19300	15000	9260	57000	31900	90800	42600	34400	22500	100000	48000	45600
5	21200	12000	32900	54600	22600	94400	60700	45700	33100	109000	41300	47000
6	24500	20000	23500	52600	39400	115000	65600	32100	48800	105000	41900	46700
7	26900	32000	21700	51500	57700	137000	63900	35500	40000	109000	50300	44000
8	19600	30000	24800	53800	66000	135000	61700	47300	17200	108000	46900	38700
9	17500	30000	37400	60700	61400	121000	62400	50200	29300	102000	37000	25600
10	23700	28000	26700	71200	51600	85300	62200	56600	35200	92700	36800	23400
11	23200	32000	21700	83100	49200	72200	66100	66100	38600	82200	36800	41800
12	26400	19400	32700	99700	48700	68300	65300	50100	39200	68400	24600	44000
13	26300	17300	36300	130000	51400	61000	54300	47800	50400	67400	22600	43800
14	25200	33000	20700	153000	57400	52200	42100	42200	70600	64100	44800	43200
15	19600	15200	16600	149000	59700	50600	24300	44700	86900	62500	47100	48700
16	18900	18900	34900	129000	57700	50300	21200	48100	130000	63000	45700	50300
17	22700	37100	23800	115000	49600	48300	28200	45200	130000	60500	45800	49700
18	26300	34400	10800	96700	49400	39900	29700	44600	131000	49400	45300	49300
19	28700	20100	17200	93000	58100	19900	28900	45900	132000	53800	29400	49400
20	29000	28500	11900	82900	74300	26500	23400	23200	132000	54600	27800	49300
21	26000	44000	12500	62800	81300	38200	23400	17300	140000	52800	47000	49100
22	14000	45000	12100	60300	101000	51000	14000	39100	164000	46000	47800	49100
23	15000	50000	20200	55700	107000	50000	15200	47700	182000	40900	49200	49500
24	20000	52000	16100	49400	104000	50400	31100	47400	167000	54500	50000	49400
25	25000	52000	21300	48500	99200	51000	28900	46500	135000	54000	49600	49500
26	28000	38200	35900	49300	95500	49600	33300	48700	116000	54000	25600	49900
27	16900	46800	41100	50200	88800	51000	19500	25500	106000	54000	25200	49800
28	17900	37800	39800	44000	104000	50100	23800	27700	95700	52000	44100	50100
29	13300	49500	37400	22300	---	50700	8810	40700	79400	40000	45800	59000
30	14000	50400	29400	42100	---	51700	9150	48600	76200	31000	46200	104000
31	24000	---	28600	40800	---	56100	---	49300	---	50000	47200	---
TOTAL	649710	960600	810160	2208000	1763500	2166500	1088160	1249200	2526800	2137500	1302500	1414700
MEAN	20960	32020	26130	71230	62980	69890	36270	40300	84230	68950	42020	47160
MAX	29000	52000	49200	153000	107000	137000	66100	66100	182000	109000	52000	104000
MIN	6690	12000	9260	22300	22600	19900	8810	12800	17200	31000	22600	23400

CAL YR 1988 TOTAL 7829980 MEAN 21390 MAX 115000 MIN 5930 CFSM 0.93 IN. 12.62
WTR YR 1989 TOTAL 18277330 MEAN 50070 MAX 182000 MIN 6690 CFSM 2.77 IN. 37.56

03575830 INDIAN CREEK NEAR MADISON, AL

LOCATION.--Lat 34°41'50", long 86°42'00", in NE¼ sec. 14, T. 4 S., R. 2 W., Madison County. Hydrologic Unit 06030003, on downstream side of bridge on State Highway 20, 0.3 mi downstream from Southern Railroad bridge, 2.8 mi east of Madison, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--49.0 mi².

PERIOD OF RECORD.--October 1959 to September 1966, October 1966 to September 1972 (peak discharge only), October 1972 to September 1975 (flood hydrograph only), October 1975 to current year.

REVISED RECORDS.--WSP 1910: 1960.

GAGE.--Water-stage recorder. Datum of gage is 601.32 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--21 years (water years 1960-66, 1976-89), 63.0 ft³/s, 17.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s, Mar. 16, 1973, gage height, 12.70 ft; minimum discharge, 0.65 ft³/s, June 10, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 11	1830	1,760	7.19	June 9	0200	*3,120	*8.42
Mar. 5	2130	2,850	8.23	July 5	0315	1,870	7.33

Minimum daily discharge, 3.0 ft³/s, Oct. 16.

CORRECTIONS.--Calendar year total for 1980 is 31,192.7 ft³/s and not the figure previously published.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	4.1	37	334	89	237	94	41	14	106	32	11
2	8.0	3.9	33	139	82	188	81	39	58	289	32	9.8
3	4.4	3.8	31	211	78	165	96	37	24	179	34	9.2
4	4.1	46	29	127	74	306	647	38	21	250	30	8.3
5	3.9	69	26	102	97	1440	328	93	132	726	28	8.0
6	3.8	14	25	116	174	1170	181	52	161	205	27	7.8
7	3.6	11	24	96	131	330	302	35	48	131	27	7.7
8	3.5	9.8	23	461	106	255	277	31	325	106	24	7.7
9	3.5	8.9	22	176	92	214	197	30	1200	92	23	7.5
10	3.4	9.0	21	134	86	187	151	30	126	86	22	22
11	3.2	9.0	19	854	83	168	131	28	77	234	21	16
12	3.1	8.6	18	1090	79	151	119	26	63	156	19	9.6
13	3.4	14	17	1060	77	138	109	25	149	127	19	8.5
14	3.2	9.9	17	456	189	126	101	25	293	133	18	10
15	3.1	9.0	16	425	184	116	106	24	689	81	17	8.3
16	3.0	9.7	15	250	118	117	95	23	256	91	17	7.9
17	3.2	11	15	198	215	103	85	22	146	78	18	7.6
18	4.1	9.4	14	173	461	97	80	21	115	65	17	7.6
19	6.0	50	14	152	292	90	74	20	739	63	16	7.5
20	3.5	148	13	135	199	176	69	28	402	60	15	7.3
21	4.2	44	16	118	933	135	65	25	219	71	14	10
22	3.9	28	17	110	285	105	61	21	536	109	15	11
23	3.6	23	142	104	195	119	58	22	175	57	14	11
24	3.9	20	94	98	160	120	54	19	123	52	34	11
25	3.5	18	59	92	147	107	51	18	102	47	21	29
26	3.5	124	42	92	138	92	49	18	88	44	13	18
27	3.6	350	37	97	503	85	47	25	92	41	12	13
28	12	78	69	86	650	80	45	20	141	40	12	13
29	4.9	49	62	83	---	81	43	17	89	41	11	50
30	4.3	40	202	148	---	92	42	16	75	36	12	63
31	4.2	---	392	103	---	151	---	15	---	35	11	---
TOTAL	135.6	1232.1	1561	7820	5917	6941	3838	884	6678	3831	625	418.3
MEAN	4.37	41.1	50.4	252	211	224	128	28.5	223	124	20.2	13.9
MAX	12	350	392	1090	933	1440	647	93	1200	726	34	63
MIN	3.0	3.8	13	83	74	80	42	15	14	35	11	7.3

CAL YR 1988 TOTAL 9063.42 MEAN 24.8 MAX 663 MIN .88
WTR YR 1989 TOTAL 39881.0 MEAN 109 MAX 1440 MIN 3.0

03586500 BIG NANCE CREEK AT COURTLAND, AL

LOCATION.--Lat 34°40'12", long 87°19'02", in SW¼ sec. 30, T. 4 S., R. 7 W., Lawrence County, Hydrologic Unit 06030005, near right bank on downstream side of bridge on county road 25, at Courtland, and at mile 12.9.

DRAINAGE AREA.--166 mi^2.

PERIOD OF RECORD.--July 1935 to September 1940, March 1945 to September 1981, March 1988 to current year.

REVISED RECORDS.--WSP 1033: 1939, 1940(M). WSP 1053: 1939(M). WSP 1306: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 537.60 ft above National Geodetic Vertical Datum of 1929. July 25, 1935 to Sept. 30, 1940, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of specific conductance and water temperature were made during the year and are published under MISCELLANEOUS WATER-QUALITY SITES in this report.

AVERAGE DISCHARGE.--42 years (water years 1936-40, 1946-81, 1989), 272 ft^3/s, 22.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,200 ft^3/s, Mar. 16, 1973, gage height, 24.97 ft; minimum daily, 0.4 ft^3/s, Sept. 15-17, 1954, Oct. 3-6, 12-17, 20-22, 1955; minimum gage height observed, 1.18 ft, Oct. 25, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 14	0530	4,960	17.21	Mar. 6	2115	*6,450	*19.26
Mar. 1	0315	4,220	15.69	June 20	1230	4,050	15.32

Minimum discharge, 3.9 ft^3/s, Oct. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	20	157	2540	377	3520	641	72	37	297	58	657
2	168	16	123	978	282	1000	308	73	71	570	47	125
3	113	16	102	898	239	593	225	68	249	1610	41	75
4	39	36	91	881	234	511	1120	63	129	1140	37	57
5	19	285	80	489	258	1560	2110	105	599	651	33	45
6	12	195	72	407	840	5100	947	427	1050	443	32	37
7	8.7	69	66	356	822	4800	630	175	567	303	64	32
8	7.1	43	62	996	509	1230	827	102	342	386	57	28
9	6.2	33	57	1170	369	606	901	91	819	274	39	26
10	5.3	43	55	599	283	504	505	83	487	481	32	25
11	4.8	45	56	1190	245	436	389	70	248	458	28	22
12	4.5	46	50	3030	224	372	323	61	169	412	26	24
13	4.3	68	46	4160	200	303	264	55	1240	507	24	52
14	4.0	118	43	4600	596	250	224	52	3260	685	22	48
15	4.2	70	41	3210	1000	214	212	81	2740	370	21	28
16	5.1	57	37	2070	535	208	216	78	2660	209	20	27
17	6.5	60	34	814	1100	211	183	61	1490	488	33	30
18	9.0	94	32	620	2050	176	156	52	612	235	28	28
19	11	87	30	530	1960	156	140	46	2000	154	21	23
20	10	1190	29	465	1080	279	136	184	3780	281	19	19
21	9.7	1570	31	405	2370	365	127	501	2360	177	17	17
22	9.1	397	46	357	2950	308	113	200	1040	121	16	766
23	9.3	211	341	313	980	219	104	121	529	112	15	2750
24	11	153	536	269	591	247	96	129	405	92	15	2630
25	13	121	421	226	499	223	89	87	319	92	148	481
26	13	120	229	197	454	182	84	69	247	104	304	1070
27	15	690	153	268	888	158	79	60	189	76	152	582
28	23	612	538	263	3030	142	75	66	160	75	60	260
29	45	323	830	200	---	130	71	63	138	56	34	496
30	60	203	477	653	---	381	70	48	125	49	77	2400
31	32	---	2000	778	---	928	---	41	---	47	1360	---
TOTAL	762.8	6991	6865	33932	24965	25312	11365	3384	28061	10955	2880	12860
MEAN	24.6	233	221	1095	892	817	379	109	935	353	92.9	429
MAX	168	1570	2000	4600	3030	5100	2110	501	3780	1610	1360	2750
MIN	4.0	16	29	197	200	130	70	41	37	47	15	17
CFSM	.15	1.40	1.33	6.59	5.37	4.92	2.28	.66	5.63	2.13	.56	2.58
IN.	.17	1.57	1.54	7.60	5.59	5.67	2.55	.76	6.29	2.45	.65	2.88

WTR YR 1989 TOTAL 168332.8 MEAN 461 MAX 5100 MIN 4.0 CFSM 2.78 IN. 37.72

TENNESSEE RIVER MAIN STEM

03589500 TENNESSEE RIVER AT FLORENCE, AL

LOCATION.--Lat 34°47'13", long 87°40'12", in SW¼ sec. 14, T. 3 S., R. 11 W., Lauderdale County, Hydrologic Unit 06030005, on right bank at lower end of Patton Island, 137 ft upstream from Southern Railway bridge, 700 ft upstream from O'Neal Bridge on U.S. Highway 72, 1.1 mi south of Florence Post Office, 1.7 mi upstream from Cypress Creek, 2.7 mi downstream from Wilson Dam, and at mile 256.7.

DRAINAGE AREA.--30,810 mi², approximately.

PERIOD OF RECORD.--November 1871 to September 1894 (gage heights only), October 1894 to current year.

REVISED RECORD.--WSP 473: 1897(M). WSP 1306: 1914(M), 1936 (monthly runoff). WSP 1436: 1897, 1899, 1916.

GAGE.--Water-stage recorder. Datum of gage is 401.12 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1926, several National Weather Service staff gages at or near Southern Railway bridge 137 ft downstream at same datum. Apr. 1, 1926, to Mar. 11, 1958, water-stage recorder on left bank at lower end of old lock and dam, 1,400 ft upstream at same datum. Since Oct. 1, 1938, auxiliary water-stage recorder 15.2 mi downstream.

REMARKS.--No estimated daily discharges. Records good except those below 25,000 ft³/s, which are fair. Slight regulation since 1924 by Wilson Lake and increasing regulation since 1936 as other reservoirs have been built above station. Flow now almost completely regulated.

AVERAGE DISCHARGE.--95 years, 51,450 ft³/s, 22.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 530,000 ft³/s, Mar. 17, 1973, maximum gage height, 32.5 ft, Mar. 19, 1897; minimum daily discharge, 105 ft³/s, Sept. 7, 1969 (computed on basis of Wilson Dam records), minimum gage height, -0.30 ft, Oct. 8, 1925, caused by filling of Wilson Lake.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1867 reached a stage of 31.1 ft, from National Weather Service records, discharge, 421,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 267,000 ft³/s, Jan. 13, maximum gage height, 21.71 ft, June 22; minimum daily discharge, 10,000 ft³/s, Apr. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14900	33400	55600	48700	43600	160000	32300	16400	45100	93400	46700	58000
2	16000	26800	67900	78900	36100	162000	23200	16900	42500	122000	49700	42300
3	26500	20300	28900	73700	55500	150000	37400	25000	29000	130000	50600	41500
4	28300	14600	13700	77100	48900	139000	56600	37600	20000	133000	50400	51200
5	29500	22500	46200	82200	36500	184000	105000	55000	30200	130000	49000	48900
6	33500	28800	34500	86000	47400	201000	98300	32100	48200	128000	44000	48400
7	33400	34100	31000	74000	64800	197000	87000	37000	48100	120000	47900	53400
8	12100	39800	31400	70000	65300	185000	86000	58100	34700	119000	33000	50900
9	14400	38100	48100	80000	76500	168000	84800	65800	42400	115000	34600	37500
10	19800	37800	33100	87600	76300	123000	84900	57200	60700	111000	33400	34000
11	20900	33200	32200	106000	57700	102000	74400	57600	48300	96700	34000	51700
12	26800	27100	45600	166000	52200	102000	77300	53200	50000	102000	29300	49600
13	31500	22200	52100	239000	69800	84300	63000	43800	58900	102000	25700	42200
14	26100	42000	30800	239000	77400	77500	53200	50800	104000	81500	44000	41300
15	14000	21100	25800	227000	91900	69900	35600	46300	120000	73200	40300	50300
16	14800	25700	47700	193000	79000	74400	20900	46500	165000	67900	45000	49700
17	21300	42900	30400	148000	78800	72700	31500	50500	160000	64300	41700	44400
18	23000	38300	17400	138000	62700	47500	37400	54100	142000	65300	40700	47200
19	25200	21500	35000	129000	86200	20800	36800	54400	189000	63900	33900	41400
20	31600	33600	20300	102000	101000	41000	24600	41900	173000	68200	33900	57400
21	29900	61400	18700	98400	146000	51900	28000	27500	172000	56700	49500	55100
22	15300	62800	18000	87400	143000	64600	12600	46600	202000	53100	46300	60000
23	14400	60400	28200	87700	150000	52200	10000	44100	208000	39400	45000	64700
24	31500	55800	29700	60700	139000	51100	39600	45400	188000	50400	51400	64000
25	28800	61900	43600	56500	130000	43900	41000	46800	152000	51300	46400	69600
26	29800	49500	60500	60300	121000	33000	39000	52600	107000	52700	35500	71900
27	18300	54000	66400	69100	115000	48500	18700	35900	118000	53900	34200	68600
28	20500	51500	56100	57700	140000	52600	21400	25000	112000	60000	48000	72800
29	18800	58700	60300	40300	---	49200	11600	44200	94800	40000	49000	73300
30	17100	61100	47700	69800	---	58800	10600	39000	72800	35100	49000	86500
31	25200	---	42100	58000	---	75400	---	42600	---	48400	55000	---
TOTAL	713200	1180900	1199000	3191100	2391600	2942300	1382700	1349900	3037700	2527400	1317100	1627800
MEAN	23010	39360	38680	102900	85410	94910	46090	43550	101300	81530	42490	54260
MAX	33500	62800	67900	239000	150000	201000	105000	65800	208000	133000	55000	86500
MIN	12100	14600	13700	40300	36100	20800	10000	16400	20000	35100	25700	34000

CAL YR 1988 TOTAL 10733500 MEAN 29330 MAX 132000 MIN 10600
WTR YR 1989 TOTAL 22860700 MEAN 62630 MAX 239000 MIN 10000

RESERVOIRS IN TENNESSEE RIVER BASIN

03574000 GUNTERSVILLE LAKE.--Lat 34°25'17", long 86°23'34", sec. 14, T. 7 S., R. 2 E., Marshall County, Hydrologic Unit 06030001, in powerhouse at Guntersville Dam on Tennessee River, 11 mi northwest of Guntersville, and at mile 349.0. DRAINAGE AREA, 24,450 mi^2, approximately. PERIOD OF RECORD, October 1938 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with 18 two-section lift gates 40.44 ft high by 50 ft wide. Dam completed and storage began Jan. 16, 1939; water in reservoir first reached minimum navigation pool elevation Jan. 27, 1939. Total level pool capacity at elevation 595.44 ft (top of gates) is 530,400 ft^3/s-day, of which 86,900 ft^3/s-day is controlled flood storage above elevation 593.00 ft (minimum navigation pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum elevation 596.29 ft, Mar. 2, 1944; minimum (after start of operation plan in April 1940), 590.65 ft, Nov. 12, 1968. Contents based on backwater profile.

EXTREMES FOR CURRENT YEAR: Maximum midnight contents during year, 614,000 ft^3/s-day, June 21; maximum elevation, 595.53 ft, June 22; minimum midnight contents, 430,000 ft^3/s, June 3; minimum elevation 592.32 ft, June 2.

03586000 WHEELER LAKE.--Lat 34°47'52", long 87°22'51", SW¼ sec. 9, T. 3 S., R. 8 W., Lawrence County, Hydrologic Unit 06030005, at Wheeler Dam on Tennessee River, 0.8 mi upstream from Big Nance Creek, 30.1 mi downstream from Decatur, 74.1 mi downstream from Guntersville Dam, and at mile 274.9. DRAINAGE AREA, 29,590 mi^2, approximately. PERIOD OF RECORD, September 1936 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete dam with 60 radial gates 15 ft high by 40 ft wide and 2 trashway gates 6 ft high by 37.5 ft wide. Storage began Oct. 3, 1936; water in reservoir first reached minimum pool elevation Dec. 10, 1936. Total level pool capacity at elevation 556.28 ft (top of gates) is 540,000 ft^3/s-day of which 177,000 ft^3/s-day is controlled flood storage above elevation 550.00 ft (ordinary minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum elevation 557.32 ft, Mar. 1, 1944; minimum (after start of operation plan in August 1937), 548.43 ft, Dec. 9, 1962. Contents based on backwater profile.

EXTREMES FOR CURRENT YEAR: Maximum midnight contents during year, 629,000 ft^3/s-day, June 22; maximum elevation 556.28 ft, June 19, minimum midnight contents, 375,000 ft^3/s, Dec. 15; minimum elevation 550.10 ft, Dec. 16.

03589000 WILSON LAKE.--Lat 34°47'46", long 87°37'27", in SE¼ sec. 18, T. 3 S., R. 10 W., Colbert County, Hydrologic Unit 06030005, at cooling-water intake at Wilson Dam on Tennessee River, 2.9 mi southeast of Florence, 4.1 mi upstream from Cypress Creek, 15.5 mi downstream from Wheeler Dam, and at mile 259.4. DRAINAGE AREA, 30,750 mi^2, approximately. PERIOD OF RECORD, April 1924 to current year. Prior to August 1926 monthend contents only, published in WSP 1306. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

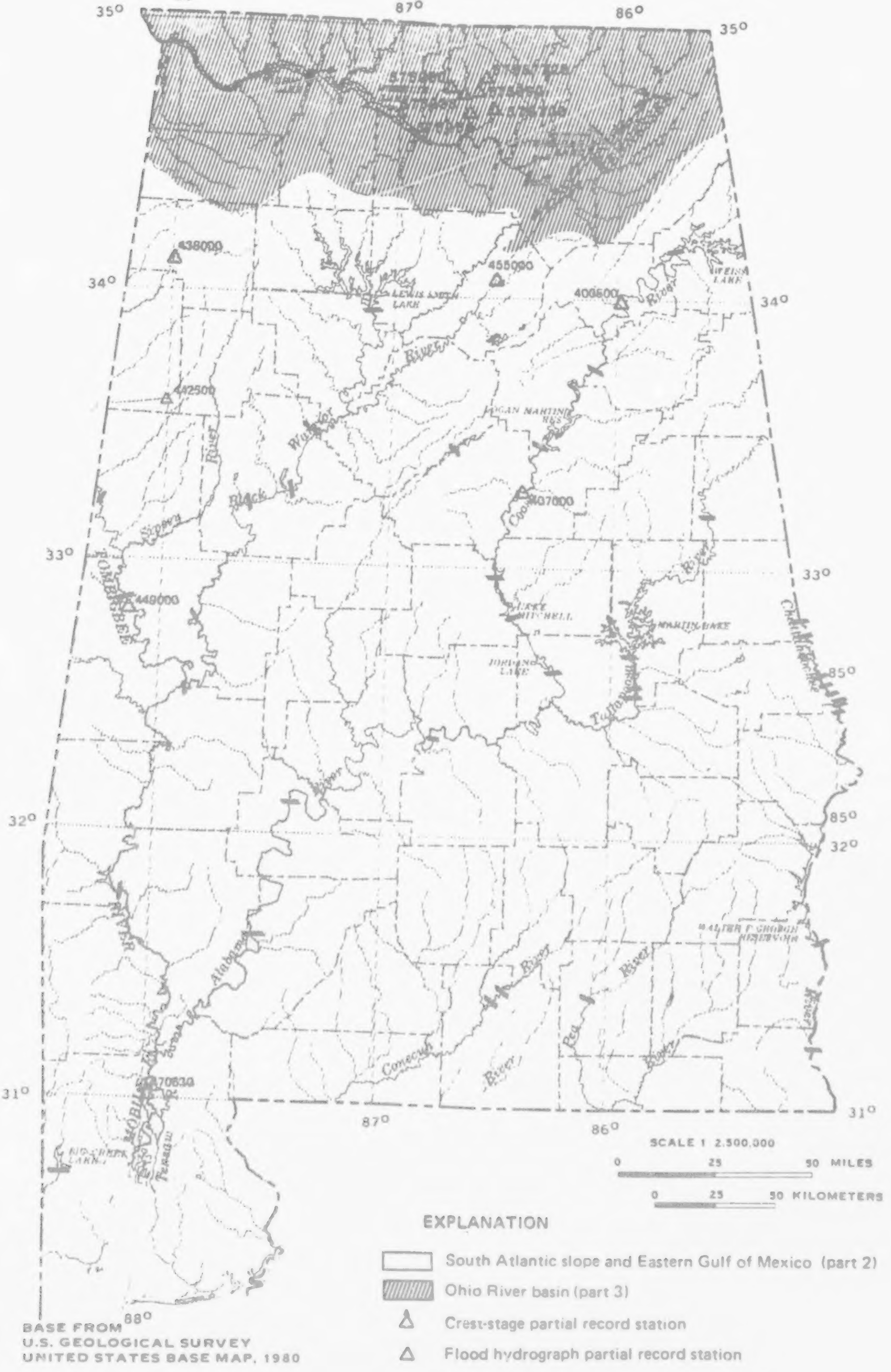
Reservoir is formed by concrete gravity dam with fixed ogee crest. Spillway equipped with 58 Stoney gates 20.54 ft high by 38 ft wide. Storage began Apr. 14, 1924. Revised capacity table used after Dec. 31, 1970. Total capacity at elevation 507.88 ft (top of gates) is 322,800 ft^3/s-day of which 26,800 ft^3/s-day is controlled flood storage above elevation 504.50 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 329,800 ft^3/s-day, Apr. 29, 1963; maximum elevation, 508.38 ft, May 19, 1983; minimum contents, 233,200 ft^3/s-day, Apr. 6, 1927, elevation, 501.30 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents during year, 323,300 ft^3/s-day, Sept. 27; elevation, 507.95 ft, Sept. 27; minimum 295,700 ft^3/s-day, Dec. 28, elevation 504.50 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

Date	Elevation (feet)	Contents (cfs-day)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-day)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-day)	Change in contents (cfs-day)
	03574000	GUNTERSVILLE LAKE		03586000	WHEELER LAKE		03589000	WILSON LAKE	
Sept. 30.............	594.87	510,000	....	553.81	456,000	....	507.45	319,200	....
Oct. 31.............	594.07	480,000	-30,000	553.15	437,000	-19,000	507.26	317,700	-1,500
Nov. 30.............	593.94	479,000	-1,000	552.70	434,000	-3,000	507.03	315,800	-1,900
Dec. 31.............	594.60	500,000	+21,000	552.10	411,000	-23,000	505.84	306,300	-9,500
CAL YR 1988	......	....	+40,000	......	....	+23,000	......	....	-4,000
Jan. 31.............	593.96	479,000	-21,000	551.91	411,000	0	505.77	305,700	-600
Feb. 28.............	594.49	531,000	+52,000	555.60	561,000	+150,000	506.33	310,200	+4,500
Mar. 31.............	593.87	488,000	-43,000	554.55	494,000	-67,000	505.26	301,700	-8,500
Apr. 30.............	594.62	495,000	+7,000	555.58	513,000	+19,000	507.11	316,500	+14,800
May 31.............	592.53	443,000	-52,000	556.05	537,000	+24,000	506.88	314,600	-1,900
June 30.............	595.02	533,000	+90,000	556.00	543,000	+6,000	507.46	319,300	+4,700
July 31.............	594.80	515,000	-18,000	555.27	512,000	-31,000	507.11	316,500	-2,800
Aug. 31.............	594.30	500,000	-15,000	555.13	508,000	-4,000	506.95	315,200	-1,300
Sept. 30.............	594.82	569,000	+69,000	555.05	557,000	+49,000	507.68	321,100	+5,900
WTR YR 1989	......	....	+59,000	......	....	+101,000	......	....	+1,900


88°
87°
86°
35°
35°
34°
34°
33°
33°
32°
32°
31°
31°
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85°
87°
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88°
438000
455000
400500
442500
407000
449000
70630
LEWIS SMITH LAKE
WEISS LAKE
LOGAN MARTIN RES
LAKE MITCHELL
MARTIN LAKE
JORDAN LAKE
WALTER F GEORGE RESERVOIR
BIG CREEK LAKE
Warrior River
Black
Sipsey River
TOMBIGBEE
Coosa River
Tallapoosa River
Chattahoochee
Alabama River
MOBILE RIVER
Conecuh River
Pea River
Perdido
SCALE 1 2,500,000
0 25 50 MILES
0 25 50 KILOMETERS
EXPLANATION
South Atlantic slope and Eastern Gulf of Mexico (part 2)
Ohio River basin (part 3)
Crest-stage partial record station
Flood hydrograph partial record station
Dam

BASE FROM
U.S. GEOLOGICAL SURVEY
UNITED STATES BASE MAP, 1980

Figure 6.--Location of partial-record stations.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood flow analyses, depending on the type of data collected. In addition, peak discharge information is gathered and discharge measurements are often made at sites not included in the partial-record program. This information is usually collected in times of drought or flood to give better areal coverage of those events.

Records collected at flood hydrograph partial-record stations are presented in the following tables. Annual maximum discharges for crest-stage partial-record stations, peak discharges at miscellaneous sites, discharge measurements made at low-flow partial-record sites, miscellaneous sites, and for special studies are given in separate tables as appropriate.

The data given in the following tables generally comprise a description of the station and a table showing time, gage height, and discharge at selected times for major peaks that occurred during the year.

The description of the station gives the location, drainage area, period of record, type and history of gages, extremes of discharge, and general remarks. The explanation of data presented is identical to that for gaging stations.

Flood hydrograph partial-record stations

MOBILE RIVER BASIN

MOBILE RIVER MAIN STEM

02400500 COOSA RIVER AT GADSDEN, AL

LOCATION.--Lat 34°00'37", long 85°59'52", in NE¼ sec. 10, T. 12 S., R. 6 E., Etowah County, Hydrologic Unit 03150106, near midstream in pier of Etowah County Memorial Bridge on Forrest Avenue in Gadsden, 450 ft downstream from Louisville & Nashville Railroad bridge, 1.5 mi upstream from Big Wills Creek, and at mile 174.8.

DRAINAGE AREA.--5,805 mi².

PERIOD OF RECORD.--October 1926 to September 1976. October 1976 to current year (flood hydrograph and gage-height record only). Gage-height records collected at same site since 1890 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1906: 1944, 1947-49, 1951-52, 1954, 1958. WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 485.97 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1926, nonrecording gage on Louisville & Nashville Railroad bridge 450 ft upstream at datum 1.15 ft higher. Oct. 1, 1926, to Mar. 31, 1932, water-stage recorder, and Apr. 1, 1932, to May 23, 1935, nonrecording gage, at present site and datum. Since May 4, 1965, auxiliary water stage recorder 2.2 mi upstream from base gage at present datum.

REMARKS.--No estimated discharges. Records good. Since December 1949, flow regulated by Allatoona Reservoir (station 02393500) 158.8 mi upstream and since April 1961, by Weiss Reservoir (station 02399499) 31.5 mi upstream.

AVERAGE DISCHARGE.--50 years (water years 1927-76), 9,468 ft³/s, 22.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,900 ft³/s, Apr. 11, 1936, gage height, 31.13 ft; minimum daily, 100 ft³/s, many days in water year 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1886, reached a stage of 37.9 ft, from floodmarks established by Corps of Engineers, discharge 115,000 ft³/s, from rating curve extended above 80,000 ft³/s. Flood of July 15, 1916, reached a stage of 32.7 ft, discharge 85,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46,400 ft³/s, Mar. 7; maximum gage height, 24.06 ft, June 21.

02400500 COOSA RIVER AT GADSDEN, AL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, AT INDICATED TIME, 1989 WATER YEAR

Date	Time	Discharge
03-05	0600	35,300
03-05	1200	37,700
03-05	1600	39,300
03-05	1700	40,800
03-05	1800	37,400
03-05	2000	34,100
03-05	2400	28,800
03-06	0600	29,400
03-06	1200	44,400
03-06	1800	45,400
03-06	2300	45,700
03-06	2400	45,500
03-07	0600	46,000
03-07	1200	46,200
03-07	1800	45,700
03-07	2200	46,400
03-07	2400	45,900
03-08	0600	46,000
03-08	1200	45,300
03-08	1800	44,900
03-08	2400	44,400
03-09	0600	43,900
03-09	1200	41,300
03-09	1800	38,100
03-09	2400	37,000

Date	Time	Discharge
03-10	0600	36,500
03-10	1200	35,500
03-10	1800	34,100
03-10	2400	32,100
03-11	0600	31,000
03-11	1200	29,900
03-11	1800	28,200
03-11	2400	27,500
03-12	0600	26,900
03-12	1200	26,100
03-12	1800	24,800
03-12	2400	24,400
03-13	1200	23,900
03-13	2400	23,500
03-14	2400	22,100
03-15	2400	14,300
06-14	2400	11,400
06-15	1200	14,700
06-15	2400	21,200

Date	Time	Discharge
06-16	0600	23,300
06-16	1200	25,200
06-16	1800	29,600
06-16	2400	31,900
06-17	0600	33,300
06-17	1200	33,900
06-17	1300	34,600
06-17	1800	31,800
06-17	2400	29,300
06-18	0600	28,700
06-18	1200	28,600
06-18	1800	27,100
06-18	2400	26,500
06-19	0600	24,100
06-19	1200	23,700
06-19	1800	19,800
06-19	2400	20,700
06-20	0600	21,200
06-20	1200	22,300
06-20	1800	24,800
06-20	2400	25,000
06-21	0600	31,500
06-21	1200	35,700

Date	Time	Discharge
06-21	1800	38,400
06-21	2300	39,400
06-21	2400	39,100
06-22	0600	39,800
06-22	1100	42,300
06-22	1200	41,100
06-22	1800	41,800
06-22	2400	41,800
06-23	0600	41,000
06-23	0900	41,500
06-23	1200	40,300
06-23	1800	39,500
06-23	2400	38,300
06-24	0600	37,200
06-24	1200	35,200
06-24	1800	32,000
06-24	2400	28,300
06-25	0600	26,000
06-25	1200	24,300
06-25	1800	23,700
06-25	2400	22,900
06-26	2400	20,300
06-27	2400	16,500

MOBILE RIVER BASIN

MOBILE RIVER MAIN STEM

02407000 COOSA RIVER AT CHILDERSBURG, AL

LOCATION.--Lat 33°17'30", long 86°21'50", in SE¼NE¼ sec. 18, T. 20 S., R. 3 E., Shelby County, Hydrologic Unit 03150107, near right bank on downstream side of Central of Georgia Railway bridge, 700 ft upstream from bridge on State Highway 38, 0.5 mi downstream from Tallasseehatchee Creek, 1 mi northwest of Childersburg, and at mile 86.3.

DRAINAGE AREA.--8,392 mi².

PERIOD OF RECORD.--October 1913 to September 1978. October 1978 to current year (flood hydrograph only). Monthly discharge only for periods October 1913 to February 1914, June 1915, July to September, November 1916, published in WSP 1304.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 382.45 ft above National Geodetic Vertical Datum of 1929 (levels by Alabama Power Co.). Prior to Oct. 1, 1915, at datum 0.10 ft lower. Since Sept. 29, 1967, auxiliary water-stage recorder, 3.5 mi downstream.

REMARKS.--No estimated discharges. Records poor. Since December 1949 flow regulated by Allatoona Reservoir on Etowah River, since April 1961 by Weiss Reservoir on Coosa River, since July 1964 by Logan-Martin Reservoir. (See Reservoirs in Mobile River basin.)

AVERAGE DISCHARGE.--65 years (water years 1914-78), 13,860 ft³/s, 22.43 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150,000 ft³/s, Apr. 14, 1979; maximum gage height, 30.41 ft, Feb. 23, 1961; minimum daily discharge, 378 ft³/s, Apr. 20, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 84,600 ft³/s, June 22, gage height, 21.53 ft, June 22.

GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND, AT INDICATED TIME, 1989 WATER YEAR

Date	Time	Gage Height	Discharge
03-03	1200	16.05	30,700
03-04	1200	16.22	30,600
03-04	1800	16.40	33,500
03-04	2000	16.96	41,500
03-04	2200	17.60	47,600
03-04	2400	18.07	51,100
03-05	0600	18.62	53,800
03-05	1200	18.73	55,000
03-05	1800	18.99	56,200
03-05	2400	19.41	61,500
03-06	0200	19.45	61,700
03-06	0400	19.48	61,900
03-06	0600	19.42	61,500
03-06	0800	19.34	60,700
03-06	1200	19.26	60,000
03-06	2400	19.22	60,000
03-07	0600	19.18	59,000
03-07	1200	18.96	57,500
03-07	2400	18.45	53,800
03-08	0600	18.28	51,600
03-08	2400	18.23	51,400
03-09	1200	18.18	50,500
03-11	1200	17.88	46,500
03-13	1200	16.61	33,400
06-19	1200	16.51	35,700
06-20	1200	16.54	37,000
06-20	2400	17.32	46,600
06-21	0600	18.26	52,900
06-21	1200	19.16	62,500
06-21	1800	20.39	74,900
06-21	2400	21.14	81,000
06-22	0200	21.34	82,500
06-22	0400	21.42	83,000
06-22	0500	21.47	84,000
06-22	0600	21.51	84,600
06-22	0800	21.52	84,000
06-22	1100	21.53	83,800
06-22	1800	21.50	83,600
06-22	2400	21.42	83,000
06-23	0600	21.14	81,000
06-23	1200	20.57	73,500
06-23	2400	19.62	69,100
06-24	0600	19.45	65,700
06-24	1200	18.76	58,100
06-24	1800	18.26	54,400
06-24	2400	18.10	52,200
06-25	1200	16.63	39,200
06-25	2400	16.26	33,100
06-26	1200	15.93	29,800
06-26	2400	15.79	29,500

MOBILE RIVER BASIN

02438000 BUTTAHATCHEE RIVER BELOW HAMILTON, AL

LOCATION.--Lat 34°06'22", long 87°56'38", on line between secs. 14 and 15, T. 11 S., R. 14 W., Marion County, hydrologic unit 03160103, near right bank on downstream side of bridge on U.S. Highway 78, 0.5 mi downstream from Woods Creek, 2 mi south of Hamilton, and at mile 82.6.

DRAINAGE AREA.--277 mi².

PERIOD OF RECORD.--October 1950 to September 1970. October 1982 to September 1984 (crest-stage only). October 1970 to September 1972, October 1984 to current year (flood hydrograph only).

REVISED RECORDS.--WDR AL-87-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 360.50 ft above National Geodetic Vertical Datum of 1929. (Levels by U.S. Army Corps of Engineers.) July 7, 1953, to July 10, 1954, nonrecording gage at site 300 ft upstream at same datum.

REMARKS.--No estimated discharges. Records good.

AVERAGE DISCHARGE.--20 years (1951-70), 506 ft³/s, 24.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,500 ft³/s, Mar. 16, 1973, gage height, 35.49 ft; 1950-70, minimum discharge, 19 ft³/s, Sept. 2-5, 15, 1954, gage height, 0.78 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Nov. 20	0700	9,780	16.52	Feb. 28	0630	*15,300	*21.99
Jan. 13	0830	12,600	19.60	Mar. 05	2030	10,200	16.97

GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND, AT INDICATED TIME, 1989 WATER YEAR

Date	Time	Gage Height	Discharge	Date	Time	Gage Height	Discharge	Date	Time	Gage Height	Discharge
01-12	0600	7.88	3,220	01-14	1800	9.25	4,080	02-28	1400	19.61	12,600
01-12	1200	8.65	3,690	01-14	2400	10.28	4,790	02-28	1800	15.61	8,990
01-12	1800	10.94	5,270					02-28	2200	11.61	5,760
01-12	2000	13.40	7,170	01-15	0600	9.08	3,960	02-28	2400	10.21	4,740
01-12	2200	15.16	8,610	01-15	1200	7.95	3,260				
01-12	2400	16.28	9,570	01-15	1800	7.13	2,770	03-01	0600	7.88	3,220
01-13	0400	18.35	11,400	02-27	1400	7.18	2,800	03-05	1000	8.00	3,290
01-13	0600	19.17	12,200	02-27	1800	9.44	4,200	03-05	1200	10.65	5,050
01-13	0800	19.57	12,600	02-27	2200	14.77	8,280	03-05	1600	14.70	8,220
01-13	0830	19.60	12,600	02-27	2400	18.19	11,300	03-05	1800	16.40	9,680
01-13	0900	19.59	12,600					03-05	2030	16.97	10,200
01-13	1200	18.76	11,800	02-28	0400	21.40	14,600	03-05	2200	16.65	9,900
01-13	1600	15.97	9,300	02-28	0600	21.90	15,200	03-05	2400	15.92	9,260
01-13	2000	12.71	6,620	02-28	0630	21.99	15,300				
01-13	2400	10.48	4,930	02-28	0700	21.93	15,200	03-06	0600	12.05	6,100
				02-28	0800	21.85	15,100	03-06	1200	9.02	3,920
01-14	0600	8.87	3,830	02-28	1000	21.35	14,500	03-06	1800	7.51	3,000
01-14	1200	7.81	3,170	02-28	1200	20.69	13,800				

MOBILE RIVER BASIN

02442500 LUXAPALLILA CREEK AT MILLPORT, AL

LOCATION.--Lat 33°34'01", long 88°05'00", in SW¼ sec. 14, T. 17 S., R. 15 W., Lamar County, Hydrologic Unit 03160105, near left bank on downstream side of bridge on State Highway 17, 0.20 mi downstream from Driver Creek, 1.0 mi north of Millport, and at mile 31.6.

DRAINAGE AREA.--247 mi².

PERIOD OF RECORD.--August 1954 to September 1959; December 1980 to September 1986. October 1986 to current year (flood hydrograph only).

REVISED RECORDS.--WDR AL-82-1: 1981. WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 243.65 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair.

AVERAGE DISCHARGE.--10 years (water years 1955-59, 1982-86), 370 ft³/s, 20.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft³/s, Dec. 3, 1983, gage height, 13.74 ft; minimum, 34 ft³/s, Sept. 15, 16, 20, 21, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximun (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Jan. 13	1230	*6,740	*12.46	Apr. 5	0215	4,300	11.55

GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND, AT INDICATED TIME, 1989 WATER YEAR

Date	Time	Gage Height	Discharge	Date	Time	Gage Height	Discharge	Date	Time	Gage Height	Discharge
01-07	2400	3.26	436	01-11	0600	4.42	796	01-12	1400	11.46	4,060
				01-11	0800	4.76	914	01-12	1600	11.58	4,330
01-08	0600	3.86	614	01-11	1000	5.78	1,310	01-12	1800	11.69	4,490
01-08	0900	4.79	924	01-11	1200	7.14	1,860	01-12	2000	11.88	4,730
01-08	1200	5.87	1,340	01-11	1400	8.34	2,400	01-12	2200	12.00	4,950
01-08	1800	5.91	1,360	01-11	1600	9.11	2,730	01-12	2400	12.04	5,080
01-08	2400	5.02	1,010	01-11	1800	9.54	2,940				
				01-11	2000	9.66	3,020	01-13	0200	12.12	5,260
01-09	0600	4.74	907	01-11	2200	9.52	2,920	01-13	0400	12.23	5,630
01-09	1200	5.04	1,020	01-11	2400	9.19	2,780	01-13	0600	12.32	6,020
01-09	1800	5.23	1,090					01-13	0800	12.37	6,310
01-09	2400	5.14	1,050	01-12	0200	9.09	2,720	01-13	1000	12.42	6,620
				01-12	0400	9.56	2,950	01-13	1200	12.43	6,650
01-10	0600	5.20	1,080	01-12	0600	10.38	3,420	01-13	1230	12.46	6,740
01-10	1200	5.05	1,020	01-12	0800	10.97	3,840	01-13	1300	12.44	6,680
01-10	1800	4.75	910	01-12	1000	11.25	4,010	01-13	1600	12.43	6,650
01-10	2400	4.49	820	01-12	1200	11.41	4,060	01-13	2000	12.42	6,620

MOBILE RIVER BASIN

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL

LOCATION.--Lat 32°49'30", long 88°09'24", in SE¼ sec. 2, T. 21 N., R. 2 W., Sumter County, Hydrologic Unit 03160106, near right bank on downstream side of bridge on State Highway 39 at Gainesville, 2 mi downstream from Noxubee River, and at mile 234.4.

DRAINAGE AREA.--8,632 mi².

PERIOD OF RECORD.--October 1938 to September 1955, October 1955 to September 1960 (fragmentary), October 1960 to September 1978. October 1978 to September 1981, October 1982 to current year (flood hydrograph only). Gage-height records collected at same site from 1937 to December 1971 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 63.29 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 2, 1939, nonrecording gage at present site and datum. Water-stage recorder 1.5 mi downstream from base gage used as base for low-water periods during 1963 water year. Since Oct. 15, 1939, auxiliary water-stage recorder 19.2 mi downstream from base gage at datum 10.14 ft lower. Prior to Oct. 15, 1939, auxiliary non-recording gage 700 ft upstream from site of auxiliary water-stage recorder.

REMARKS.--No estimated discharges. Records fair. Gage height telemeter at station.

AVERAGE DISCHARGE.--35 years (water years 1939-55, 1961-78), 12,270 ft³/s, 19.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 261,000 ft³/s, Apr. 15, 1979; maximum gage height, 56.28 ft, Apr. 15, 1979; minimum daily discharge, 250 ft³/s, Sept. 21, 22, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 107,000 ft³/s, Jan. 18, gage height, 44.54 ft.

GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND, AT INDICATED TIME, 1989 WATER YEAR

Date	Time	Gage Height	Discharge	Date	Time	Gage Height	Discharge	Date	Time	Gage Height	Discharge
01-13	0600	32.76	66,000	01-16	0600	42.75	99,000	01-19	0600	43.60	95,000
01-13	1200	34.17	70,000	01-16	1200	43.11	100,000	01-19	1200	42.94	88,000
01-13	1800	35.41	73,000	01-16	1800	43.32	102,000	01-19	1800	41.91	79,000
01-13	2400	36.69	76,000	01-16	2400	43.59	103,000	01-19	2400	40.29	71,000
01-14	0600	37.65	79,000	01-17	0600	43.83	104,000	01-20	0600	38.47	62,000
01-14	1200	38.51	82,500	01-17	1200	44.00	104,000	01-20	1200	36.46	55,000
01-14	1800	39.34	87,000	01-17	1800	44.23	105,000	01-20	1800	34.31	50,000
01-14	2400	40.37	91,000	01-17	2400	44.44	106,000	01-20	2400	32.29	45,000
01-15	0600	41.12	93,500	01-18	0600	44.53	106,000	01-21	0600	29.64	41,500
01-15	1200	41.67	94,500	01-18	1200	44.54	107,000	01-21	1200	28.35	38,500
01-15	1800	41.94	96,500	01-18	1800	44.41	105,000	01-21	1800	26.58	35,500
01-15	2400	42.41	98,000	01-18	2400	44.01	100,000	01-21	2400	24.15	33,000

MOBILE RIVER BASIN

02455000 LOCUST FORK NEAR CLEVELAND, AL

LOCATION.--Lat 34°01'28", long 86°34'27", in NE¼ sec. 6, T. 12 S., R. 1 E., Blount County, Hydrologic Unit 03160111, on left bank 200 ft upstream from bridge on U.S. Highway 231, 2.5 mi downstream from Graves Creek, 3 mi north of Cleveland, and at mile 98.6.

DRAINAGE AREA.--303 mi².

PERIOD OF RECORD.--December 1936 to September 1986, October 1986 to current year (flood hydrograph only).

REVISED RECORDS.--WSP 1112: 1943(M). WSP 1304: 1939(M), 1941(M). WDR AL-79-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is [illegible].94 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers benchmark). Prior to Apr. 19, 1940, nonrecording gage at present site and datum. Apr. 20, 1940 to Apr. 11, 1945, nonrecording gage and April 12, 1945 to Sept. 30, 1972, water-stage recorder at site 200 ft downstream at same datum.

REMARKS.--No estimated discharges. Records good.

AVERAGE DISCHARGE.--49 years (water years 1938-86), 525 ft³/s, 23.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 47,000 ft³/s, Dec. 28, 1942, gage height, 19.2 ft; minimum since Oct. 1, 1943, 2.3 ft³/s, Sept. 14, 15, 16, 1954; minimum prior to Oct. 1, 1943, not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 13	0700	10,900	11.21
Feb. 28	0900	*11,400	*11.45
June 16	0300	11,300	11.37
June 22	2400	9,840	10.65
July 3	1730	9,850	10.66

GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND, AT INDICATED TIME, 1989 WATER YEAR

Date	Time	Gage Height	Discharge
01-08	1200	3.74	1,050
01-08	2400	4.16	1,340
01-09	1200	3.90	1,160
01-09	2400	4.29	1,430
01-10	1200	5.82	2,720
01-10	2400	5.47	2,380
01-11	1200	5.93	2,830
01-11	1800	8.39	5,920
01-11	2400	9.29	7,410
01-12	0600	9.01	6,950
01-12	1200	8.17	5,580
01-12	1800	7.83	5,080
01-12	2400	9.25	7,340
01-13	0600	11.06	10,600
01-13	0700	11.21	10,900
01-13	1200	11.06	10,600
01-13	1800	10.39	9,360
01-13	2400	9.06	7,030
01-14	0600	8.04	5,380
01-14	1200	7.34	4,430
01-14	1800	6.77	3,740
01-14	2400	6.47	3,400
01-15	1200	6.10	3,000
01-15	2400	5.52	2,430
01-16	1200	5.06	2,020
01-16	2400	4.72	1,740
01-17	2400	4.18	1,350
01-18	2400	3.84	1,120
01-19	2400	3.58	950
02-27	0600	3.26	760
02-27	1200	3.54	926
02-27	1600	5.11	2,060
02-27	1800	6.50	3,430
02-27	2000	7.65	4,840
02-27	2400	10.30	9,190
02-28	0600	11.40	11,300
02-28	0900	11.45	11,400
02-28	1200	11.20	10,900
02-28	1800	10.60	9,740
02-28	2400	9.10	7,090
03-01	0600	8.00	5,320
03-01	1200	7.20	4,260
03-01	1800	6.50	3,430
03-01	2400	6.05	2,950
03-02	0600	5.38	2,300
03-02	1200	4.90	1,890
06-14	2400	2.86	559
06-15	0400	3.95	1,200
06-15	0800	4.63	1,680
06-15	1200	5.39	2,310
06-15	1400	5.97	2,870
06-15	1600	8.30	5,780
06-15	1800	10.24	9,080
06-15	2000	10.64	9,820
06-15	2200	11.17	10,800
06-15	2400	11.35	11,200
06-16	0300	11.37	11,300
06-16	0400	11.27	11,100
06-16	0600	10.96	10,400
06-16	0800	10.27	9,140
06-16	1000	9.74	8,190
06-16	1200	8.92	6,790
06-16	1600	7.41	4,520
06-16	2000	6.39	3,310
06-16	2400	6.03	2,930
06-17	0600	5.70	2,600
06-17	1200	5.33	2,260
06-17	1800	4.97	1,940
06-17	2400	4.61	1,560
06-18	1200	4.02	1,240
06-18	2400	3.68	1,010
06-19	0600	4.06	1,270
06-19	1200	6.95	3,950
06-19	1545	7.03	4,050
06-19	1800	6.89	3,880
06-19	2400	5.87	2,770
06-20	1200	5.03	2,000
06-20	1900	4.74	1,760
06-20	2400	5.96	2,860
06-21	0600	6.64	3,590
06-21	1200	9.12	7,130
06-21	1600	9.32	7,460
06-21	2400	8.34	5,840
06-22	1200	6.95	3,950
06-22	1800	9.45	7,680
06-22	2400	10.65	9,840
06-23	0600	9.22	7,290
06-23	1200	7.27	4,340
06-23	1800	6.23	3,140
06-23	2400	5.67	2,570
06-24	1200	4.95	1,930
06-24	2400	4.47	1,560
06-25	2400	3.80	1,090

MOBILE RIVER BASIN

02455000 LOCUST FORK NEAR CLEVELAND, AL--Continued

GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND, AT INDICATED TIME, 1989 WATER YEAR

Date	Time	Gage Height	Discharge	Date	Time	Gage Height	Discharge	Date	Time	Gage Height	Discharge
07-01	2400	3.01	635	07-03	0400	8.20	5,620	07-05	1200	5.28	2,210
				07-03	0800	9.22	7,290	07-05	2400	4.71	1,740
07-02	0800	3.44	866	07-03	1200	10.21	9,030				
07-02	1200	5.22	2,160	07-03	1600	10.57	9,690	07-06	1200	4.39	1,500
07-02	1600	6.98	3,990	07-03	1730	10.66	9,850	07-06	2400	4.89	1,880
07-02	2000	7.29	4,370	07-03	2000	10.53	9,610				
07-02	2400	7.55	4,710	07-03	2400	9.88	8,440	07-07	1200	4.14	1,320
								07-07	2400	3.85	1,120
				07-04	1200	7.71	4,920				
				07-04	2400	6.21	3,120	07-08	2400	3.52	914

MOBILE RIVER BASIN

02468500 CHICKASAW BOGUE NEAR LINDEN, AL

LOCATION.--Lat 32°19'45", long 87°47'27", in SW¼ sec. 28, T. 16 N., R. 3 E., Marengo County, Hydrologic Unit 03160201, near right bank on downstream side of bridge on U.S. Highway 43, 1.5 mi north of Linden, 2 mi downstream from Atkin Creek, and 11 mi upstream from mouth.

DRAINAGE AREA.--257 mi².

PERIOD OF RECORD.--January 1944 to September 1946, October 1965 to September 1988. October 1988 to September 1989 (flood hydrograph only).

REVISED RECORDS.--WDR AL-84-1: Drainage area. WDR AL-86-1: 1984-85 (P).

GAGE.--Water-stage recorder. Datum of gage is 63.45 ft above National Geodetic Vertical Datum of 1929. January 1944 to September 1946 nonrecording gage at site about 75 ft upstream at different datum. Since Jan. 10, 1966, auxiliary nonrecording gage on bridge of Alabama State Highway 28, 3 mi downstream. January 1944 to September 1946, auxiliary nonrecording gage at lock 3 on Tombigbee River 3 mi downstream from mouth of Chickasaw Bogue.

REMARKS.--No estimated discharges. Records good.

AVERAGE DISCHARGE.--25 years (water years 1945-46, 1966-88), 348 ft³/s, 18.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,700 ft³/s, Mar. 4, 1979, gage height, 30.18 ft, maximum gage height, 30.33 ft, Mar. 26, 1945, site and datum then in use; minimum observed, 0.3 ft³/s, June 27-29, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 1	0200	9,750	20.95	July 3	0400	*13,900	*23.61

GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND, AT INDICATED TIME, 1989 WATER YEAR

Date	Time	Gage Height	Discharge	Date	Time	Gage Height	Discharge	Date	Time	Gage Height	Discharge
12-31	0200	5.68	474	01-02	0600	7.10	884	07-02	1800	20.71	9,500
12-31	0400	9.07	1,730	01-02	1200	6.40	660	07-02	2000	21.53	10,600
12-31	0600	12.05	3,380	01-02	2400	5.69	476	07-02	2200	22.31	11,800
12-31	1000	16.05	5,730					07-02	2400	22.92	12,800
12-31	1400	18.42	7,370	01-03	1200	5.27	390				
12-31	1800	19.76	8,580	01-03	2400	5.02	344	07-03	0200	23.36	13,500
12-31	2000	20.18	8,980					07-03	0400	23.61	13,900
12-31	2200	20.52	9,310	07-01	1800	3.47	111	07-03	0600	23.61	13,900
12-31	2400	20.60	9,600	07-01	2400	6.34	643	07-03	0800	23.41	13,600
								07-03	1000	22.98	12,800
01-01	0200	20.95	9,750	07-02	0200	9.15	1,770	07-03	1200	22.35	11,800
01-01	0400	20.91	9,710	07-02	0400	10.57	2,530				
01-01	0600	20.69	9,480	07-02	0600	11.36	2,990	07-03	1400	21.33	10,300
01-01	0800	20.25	9,040	07-02	0800	12.83	3,840	07-03	1600	19.98	8,780
01-01	1000	19.50	8,340	07-02	1000	14.79	4,970	07-03	1800	18.20	7,180
01-01	1200	18.32	7,280	07-02	1200	17.34	6,530	07-03	2000	16.19	5,810
01-01	1400	16.75	6,150	07-02	1400	19.03	7,930	07-03	2200	14.07	4,540
01-01	1600	14.95	5,070	07-02	1600	20.01	8,810	07-03	2400	11.90	3,290
01-01	1800	13.02	3,960								
01-01	2000	11.05	2,830					07-04	0200	9.85	2,120
01-01	2200	9.39	1,890					07-04	0600	7.47	1,020
01-01	2400	8.36	1,400					07-04	1200	6.43	669
								07-04	1800	6.14	587

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1989

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		Mobile River basin					
02470630	Mobile River at Bucks	Lat 30°00'10", long 88°01'40", in NW¼ sec. 31, T. 1 N., R. 1 E., Mobile County, on right bank at Barry Steam Plant, 0.4 mi east of Bucks, and at mile 30.5. (Datum of gage is 1.91 ft below NGVD.)	[a]44,000	1951, 1953-89	3-14-89	10.33	254,000

a - approximately

Peak discharge at miscellaneous sites

The following table contains peak discharges at sites not included in the continuous gaging or crest-stage partial-record program. These discharges are generally obtained for discontinued gaging stations, discontinued crest-stage partial-record stations, or other miscellaneous sites to give better areal coverage of flood events.

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		Perdido River basin					
02377500	Styx River near Loxley	Lat 30°39'50", long 87°38'20", in SE¼ sec. 26, T. 4 S., R. 4 E., Baldwin County, at county road, 2 mi upstream from Hollinger Creek, and 7 mi northeast of Loxley.	92.2	1926, ‡1952-69, ‡1971, †1973-77	6-09-89	22.09	*

* Discharge not determined.
‡ Operated as a continuous-record station.
† Operated as a crest stage station.

Discharge Measurements made at miscellaneous sites during water year 1989

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		Apalachicola River basin				
02343590 Omusee Creek	Chattahoochee River	Lat 31°16'28", long 85°21'47", in SW¼ sec. 32, T. 4 N., R. 27 E., Houston County, at county road, 2 mi southwest of Kinsey.	13.8	--	10-19-88	*8.5
02343600 Omusee Creek	Chattahoochee River	Lat 31°17'27", long 85°17'48", in NW¼ sec. 25, T. 4 N., R. 27 E., Houston County, at county road, 3 mi northwest of Webb.	55.3	1949	10-18-88	*35
02343700 Stevenson Creek	Omusee Creek	Lat 31°21'18", long 85°11'05", in S½ sec. 26, T. 5 N., R. 28 E., Henry County, at State Highway 134, 1.0 mi upstream from mouth, and 9.5 mi east of Headland.	14.3	1964, 1969, 1985-86, 1988	10-18-88	*8.8
02343710 Omusee Creek	Chattahoochee River	Lat 31°20'31", long 85°10'38", in SW¼ sec. 6, T. 4 N., R. 29 E., Henry County, at county road, 5 mi southeast of Haleburg.	131	1986, 1988	10-18-88	*91
0235875415 Chipola Creek	Limestone Creek	Lat 31°07'54", long 85°26'28", in SE¼ sec. 21, T. 2 N., R. 26 E., Houston County, at county road, 1 mi northeast of Rehobeth, and 6 mi southwest of Dothan.	5.53	--	10-19-88	*3.3
02358755 Limestone Creek	Big Creek	Lat 31°05'57", long 85°25'14", in SE¼ sec. 34, T. 2 N., R. 26 E., Houston County, at State Highway 109, approximately 1 mi southwest of intersection of US 231, 1.5 mi southeast of Rehobeth, and 6 mi south of Dothan.	30.6	1980, 1988	10-19-88	*14
02358770 Big Creek	Marshall Creek	Lat 31°01'14", long 85°21'01", in NW¼ sec. 33, T. 1 N., R. 27 E., Houston County, at county road, 2.5 mi southeast of Madrid.	97.6	1964, 1969, 1985-86, 1988	10-19-88	*36
0235878050 Cowarts Creek	Chipola River	Lat 31°09'06", long 85°18'13", in SE¼ sec. 11, T. 2 N., R. 27 E., Houston County, at county road, 3 mi south of Avon.	8.56	--	10-19-88	*8.5
02358785 Cowarts Creek	Chipola River	Lat 31°01'00", long 85°13'21", in W½ sec. 10, T. 7 N., R. 10 W., Houston County, at State Highway 53, 5.4 mi southeast of Cottonwood.	103	1974, 1988	10-19-88	*40
		Choctawhatchee River basin				
02360000 West Fork Choctawhatchee River	Choctawhatchee River	Lat 31°39'49", long 85°30'18", in SE¼ sec. 14, T. 8 N., R. 25 E., Barbour County, at State Highway 10 at Blue Springs.	86.8	‡1944-53, †1954-70, 1986, 1988	10-18-88	*20
02360294 West Fork Choctawhatchee River	Choctawhatchee River	Lat 31°22'24", long 85°32'41", in SW¼ sec. 28, T. 5 N., R. 25 E., Dale County, at county road 20, 1.5 mi east of U.S. Highway 231, 5 mi northwest of Midland City.	354	--	10-18-88	*62
02360500 East Fork Choctawhatchee River	Choctawhatchee River	Lat 31°22'23", long 85°28'38", in SE¼ sec. 2, T. 4 N., R. 24 E., Dale County, at county road, 4 mi north of Midland City	291	‡1952-63, †1964-70, 1986, 1988	10-18-88	*59
02361250 Hurricane Creek	Choctawhatchee River	Lat 31°06'23", long 85°39'02", in NW¼ sec. 35, T. 2 N., R. 24 E., Geneva County, at State Highway 52, 3 mi east of Hartford.	19.4	1948, 1964, 1969	9-20-89	11

See footnotes at end of table.

Discharge Measurements made at miscellaneous sites during water year 1989

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Mobile River basin				
02397660 Lumpkin Mill Creek	Spring Creek	Lat 34°05'20", long 85°26'14", in SW¼SW¼SW¼ sec. 12, T. 11 S., R. 11 E., Cherokee County, at right downstream abutment of county road, 0.2 mi north of Providence Church, 1.4 mi east of Forney, 1.6 mi above mouth, and 15 mi southeast of Centre.	6.48	--	7-19-89 8-24-89 9-12-89	17 *4.4 *4.2
02399880 South Fork Terrapin Creek	Terrapin Creek	Lat 33°51'22", long 85°31'20", in SW¼NW¼NE¼ sec. 31, T. 13 S., R. 11 E., Cleburn County, 0.1 mi upstream from unnamed tributary, 0.35 mi above Marys Creek, 0.5 mi upstream from Cleburne County road, and 1.45 mi east of Grantley.	8.96	--	8-24-89 9-11-89	4.0 4.5
02399885 Mary Creek	Terrapin Creek	Lat 33°51'33", long 85°31'33", in NE¼NE¼NW¼ sec. 31, T. 13 S., R. 11 E., Cleburne County, 1.2 mi east, northeast of Grantley, on left bank 400 ft above mouth.	4.39	--	7-19-89 8-24-89 9-11-89	5.2 2.1 2.6
02401374 Little Canoe Creek	Big Canoe Creek	Lat 33°45'09", long 86°29'10", in SE¼SW¼SE¼ sec. 1, T. 15 S., R. 1 E., St. Clair County, on county road 0.08 mi east of U.S. Highway 11, and 1.75 mi southwest of Springville.	6.23	--	7-18-89 8-23-89 9-11-89	6.1 *2.3 *2.5
02403085 Chocco-locco Creek	Coosa River	Lat 33°49'46", long 85°34'55", in NE¼NW¼NW¼ sec. 10, T. 14 S., R. 10 E., Cleburn County, at ford on Forest Service Road, 1.5 mi southwest of Liberty Hill, and 2.7 mi east of Rabbittown.	5.53	--	7-19-89 8-23-89 9-12-89	6.8 4.0 3.5
02405200 Coosa River	Alabama River	Lat 32°24'33", long 86°20'17", in NW¼ sec. 33, T. 18 S., R. 3 E., St. Clair County, below Logan Martin Dam, 10 mi north of Childersburg.	7,743	1964-88	10-16-88 10-16-88 5-28-89 9-10-89 9-10-89	[c]661 [c]619 [c]715 [c]648 [c]639
02406947 Tallassee-hatchee Creek	Coosa River	Lat 33°16'13", long 86°16'30", in SW¼ sec. 19, T. 20 S., R. 4 E., Talladega County, at bridge on county highway 4 mi east of Childersburg.	124	1980, 1984-85, 1987-88	5-18-88 9-21-89	[b]35 30
02416035 Sugar Creek	Elkahatchee Creek	Lat 32°54'41", long 85°57'13", in NW¼ sec. 10, T. 22 N., R. 21 E., Tallapoosa County, at bridge on State Highway 63 at southern city limits of Alexander City, 0.75 mi from intersection of U.S. Highway 280 and State Highway 63.	1.93	1949, 1980, 1984-85, 1987-88	5-18-88 9-18-89	[b]7.9 9.6
02418179 Souga-hatchee Creek	Uphapee Creek	Lat 32°39'37", long 86°27'06", in SW¼ sec. 4, T. 19 N., R. 26 E., Lee County, at bridge on county highway 35, 3 mi northwest of Opelika.	32.5	1978, 1980, 1984-85, 1987-88	5-19-88 9-20-89	[b]14 18
02423160 Cahaba River	Alabama River	Lat 33°36'12", long 86°32'56", in NW¼ sec. 33, T. 16 S., R. 1 E., Jefferson County, at county road crossing, 0.7 mi northwest of Whites Chapel, 3.9 mi north of Leeds, and at mile 174.5.	--	1972, 1985	3-14-89 5-23-89 9-14-89	82 34 16
02423425 Cahaba River	Alabama River	Lat 33°24'56", long 86°44'23", in NW¼ sec. 3, T. 19 S., R. 2 W., Shelby County, on left bank 700 ft upstream from bridge on county road, 2.5 mi upstream from Little Shades Creek, and 3.0 mi south of Cahaba Heights.	201	1972, ‡1975-85, 1986-88	11-03-88 3-13-89 5-22-89 9-13-89	3.2 306 47 *3.9
02423515 Patton Creek	Cahaba River	Lat 33°23'20", long 86°49'38", in NW¼ sec. 14, T. 19 S., R. 3 W., Jefferson County, at bridge on Pattons Chapel Road, 0.8 mi upstream from Paradise Lake, and 1 mi southeast of Bluff Park.	10.5	1956-57, 1964, 1975, 1980, 1984, 1986-88	11-02-88 3-14-89 5-22-89 9-13-89	*2.0 10 3.1 *2.7

See footnotes at end of table.

Discharge Measurements made at miscellaneous sites during water year 1989--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		Mobile River basin--Continued				
02423550 Buck Creek	Cahaba River	Lat 33°17'30", long 86°50'36", in NW¼ sec. 15, T. 20 S., R. 3 W., Shelby County, on State Highway 261 at Helena, 350 ft north of Louisville and Nashville Railroad.	69.9	1984-88	11-02-88 3-14-89 5-22-89 9-14-89	*16 105 54 *29
02423555 Cahaba River	Alabama River	Lat 33°17'04", long 86°52'58", on line between secs. 19 and 20, T. 20 S., R. 3 W., Shelby County, on right bank at downstream side of bridge on county highway 52, 1 mi above mouth of Trigger Creek, and 3 mi west of Helena.	335	†1965-77, 1984, 1986-88	11-02-88 3-14-89 5-23-89 9-14-89	52 438 173 67
02423601 Shades Creek	Cahaba River	Lat 33°21'21", long 86°53'24", in NE¼ sec. 30, T. 19 S., R. 3 W., Jefferson County, at bridge on county road, 0.8 mi southwest of Parkwood.	44.1	1953, 1955-56, †1968-71, 1984-88	11-02-88 3-14-89 5-23-89 9-14-89	*8.1 44 47 *11
02449950 Broglan River	Mulberry Fork	Lat 34°05'01", long 86°44'25", in NW¼ sec. 15, T. 11 S., R. 2 W., Cullman County, at State Highway 91, 2.0 mi northeast of Hanceville.	108	1967-68, 1972, 1978, 1984, 1986-88	11-03-88 3-15-89 6-01-89 9-14-89	22 167 21 30
02450240 Hubbard Creek	Sipsey Ford	Lat 34°18'27", long 87°30'12", in NW¼SW¼SE¼ sec. 32, T. 8 S., R. 9 W., Lawrence County, on Kinlock Spring Road, 3.8 mi northeast of Forkville.	10.7	--	8-22-89 9-13-89	2.3 5.1
02450285 North Fork Caney Creek	Caney Creek	Lat 34°15'47", long 87°25'10", in SW¼NE¼SW¼ sec. 18, T. 9 S., R., 8 W., Winston County, 0.8 mi upstream from South Fork Caney Creek, 1.95 mi southwest of gaging station 02450250, and 4.2 mi east of Rabbittown.	--	--	8-22-89 9-13-89	1.2 2.2
02450440 Collier Creek	Brushy Creek	Lat 34°15'37", long 87°16'58", in SE¼NW¼SW¼ sec. 16, T. 9 S., R. 7 N., Winston County, 0.2 mi above mouth, and 2.4 mi southeast of Grayson.	7.45	--	8-28-89 9-13-89	2.9 4.0
02455000 Locust Fork	Black Warrior River	Lat 34°01'28", long 86°34'27", in NE¼ sec. 6, T. 12 S., R. 1 E., Blount County, on left bank 200 ft upstream from bridge on U.S. Highway 231, 2.5 mi downstream from Graves Creek, 3 mi north of Cleveland.	303	‡1936-86, 1987-88	1-12-89 5-24-89	5,040 229
02456330 Crooked Creek	Turkey Creek	Lat 33°44'10", long 86°52'00", in NE¼ sec. 17, T. 15 S., R. 3 W., Jefferson County, at county road bridge 2 mi southwest of Sardis, 3.2 mi west-southeast of Morris, and 3.6 mi above mouth.	16.2	†1975-88	11-03-88 12-07-88	*2.7 12
02460050 Village Creek	Locust Fork	Lat 33°33'58", long 87°00'09", in NW¼ sec. 18, T. 17 S., R. 4 W., Jefferson County, on Shady Grove Road, 1.6 mi north of Booker Heights Subdivision, 1.75 mi northwest of Mulga, and 2.8 mi north of Highway 269.	77.9	1973-74, 1983-84, 1987-88	11-02-88 3-14-89 5-23-89 9-14-89	51 142 113 87
02461700 Valley Creek	Black Warrior River	Lat 33°23'15", long 87°03'33", in NE¼ sec. 16, T. 19 S., R. 5 W., Jefferson County, at bridge on county highway 36, and 2.5 mi northeast of Johns.	93.0	1973, 1980, 1984-88	11-01-88 3-14-89 5-23-89 9-14-89	101 230 154 126

See footnotes at end of table.

Discharge Measurements made at miscellaneous sites during water year 1989--Continued

					Measurements	
Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Date	Discharge (ft^3/s)
		Mobile River basin--Continued				
02464035 Cripple Creek	North River	Lat 33°28'25", long 86°34'06", in NE¼ sec. 22, T. 18 S., R. 10 W., Tuscaloosa County, 0.8 mi upstream from mouth, and 2.1 mi east of Samantha Post Office.	16.4	1978-80, 1982-88	10-03-88	18.0
					10-31-88	*3.6
					11-29-88	43
					1-04-89	34
					1-31-89	19
					3-01-89	122
					3-31-89	72
					5-02-89	*7.2
					5-30-89	*2.3
					7-06-89	73
					8-01-89	*6.5
					9-05-89	*1.2
02464149 Turkey Creek	Lake Tuscaloosa (North River)	Lat 33°24'23", long 87°32'18", in SW¼ sec. 12, T. 19 S., R. 10 W., Tuscaloosa County, 0.8 mi downstream from Long Creek, 1.0 mi northwest of Patterson Chapel, and 2.7 mi upstream from mouth.	10.6	1982-88	10-04-88	*3.7
					11-01-88	*2.8
					11-30-88	11
					1-05-89	13
					2-01-89	11
					3-03-89	26
					4-04-89	30
					5-01-89	*8.4
					6-02-89	*2.8
					7-03-89	116
					8-02-89	*5.1
					9-06-89	*2.2
02464660 Carroll Creek	Lake Tuscaloosa (North River)	Lat 33°17'41", long 87°34'01", in NE¼ sec. 22, T. 20 S., R. 10 W., Tuscaloosa County, at bridge on State Highway 69, 4.5 mi north of Northport.	20.9	1983-88	10-05-88	*4.5
					11-02-88	*3.8
					12-01-88	9.8
					1-06-89	17
					2-02-89	13
					3-06-89	113
					4-03-89	20
					5-02-89	*4.1
					6-01-89	*2.4
					7-05-89	148
					8-01-89	*4.0
					9-07-89	*1.9
		Tennessee River basin				
03574816 Banyon Swamp Creek	Brier Fork Flint River	Lat 34°54'23", long 86°38'02", in NW¼SW¼SE¼ sec. 33, T. 1 S., R. 1 W., Madison County, at culvert on Murphy Hill Road, 1.5 mi upstream from mouth and 4.0 mi southwest of Hazel Green.	--	1970-71, 1972	8-09-89	*1.1
03574840 Morris Branch	Beaverdam Creek	Lat 34°53'57", long 86°41'55", NW¼SE¼NE¼ sec. 2, T. 2 S., R. 2 W., Madison County, 100 ft upstream from bridge on Bo Howard Road, 0.3 mi south of Pulaski Pike, 2.0 mi east of Toney, and at mile 0.8.	1.43	[d]1971-74	8-09-89	0
03574850 Dyas Swamp	Beaverdam Creek	Lat 34°52'04", long 86°39'41", in SE¼NE¼ sec. 18 T. 2 S., R. 1 W., Madison County, at bridge crossing on Beaverdam Road, 1.5 mi east of Bo Howard Road, and 3.5 mi east of Sparkman High School.	--	[b]1970	[b]10-20-69	0
					8-09-89	*.1
03575760 Kelly Spring	Indian Creek	Lat 34°48'54", long 86°42'44", in NW¼NW¼NW¼ sec. 2, T. 3 S., R. 2 W., Madison County, 3.6 mi southeast of Harvest.	--	1929, 1970-71, 1973	[a]8-09-89	*5.3
					9-18-89	*2.2
					9-19-89	*2.6
					9-20-89	*2.3
					9-20-89	*2.8
					9-20-89	*2.8
					9-20-89	*3.0
					9-20-89	*3.0
03575784 Nichols Spring	Unnamed tributary to Monrovia Branch to Indian Creek	Lat 34°46'57", long 86°43'15", in NW¼SW¼NE¼ sec. 15, T. 3 S., R. 2 W., Madison County, 5.2 mi southeast of Harvest.	--	1970-72	8-09-89	*1.2

See footnotes at end of table.

Discharge measurements made at miscellaneous sites during water year 1989--Continued

					Measurements	
Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Date	Discharge (ft^3/s)
		Tennessee River basin--Continued				
03575805 Dry Creek	Indian Creek	Lat 34°47'10", long 86°40'55", in NW¼NE¼NE¼ sec. 13, T. 3 S., R. 2 W., Madison County, at bridge on Blake Bottom Road, 2 mi east of Monrovia, 5.9 mi northwest of West Station Post Office in Huntsville.	11.5	--	8-09-89	*2.8
03575820 Indian Creek	Tennessee River	Lat 34°47'12", long 86°42'45", in SW¼SW¼SW¼ sec. 11, T. 3. S., R. 2 W., Madison County, at bridge on Blake Bottom Road, o.1 mi upstream from Monrovia, and 0.8 mi upstream from Monrovia Branch.	12.2	[e]1953-54, [e]1957, [e]1970-71, [e]1973	8-09-89	*8.2
03575933 Broglon Branch	Pinhook Creek	Lat 34°43'24", long 86°36'06", in SE¼NW¼ sec. 2, T. 4 S., R. 1 W., Madison County, on bridge crossing at Clinton Avenue in Huntsville, and at mile 15.1.	9.51	1987	1-12-89	75.6
03575950 Huntsville Spring Branch	Indian Creek	Lat 34°41'24", long 86°35'47", in NW¼NE¼SE¼ sec. 14, T. 4 S., R. 1 W., Madison County, at bridge on Johnson Road, 2.3 mi southeast of West Station Post Office in Huntsville, and at mile 12.2.	41.8	1967, 1970-75	3-15-89 4-04-89	107 1,330
03575980 McDonnell Creek	Huntsville Spring Branch	Lat 34°41'33", long 86°37'39", in SW¼SW¼NW¼ sec. 15, T. 4 S., R. 1 W., Madison County, at bridge on Patton Road, 2.5 mi south of West Station Post Office in Huntsville.	9.02	1970-73, 1985-86	6-22-89	85
03576206 Limestone Creek	Tennessee River	Lat 34°54'51", long 86°43'51", in NW¼SW¼NW¼ sec. 34, T. 1 S., R. 2 W., Madison County, at bridge on Old Railroad Bed Road, 50 ft upstream from Dry Creek, and 1.1 mi north of Toney.	21.2	1970-73	8-09-89	4.90
03576220 Tyrone Creek	Little Limestone Creek	Lat 34°56'00", long 86°47'12", in SW¼SE¼SE¼ sec. 24, T. 1 S., R. 3 W., Limestone County, at bridge on Bethel Road, 1.9 mi east of Bethel and 3.2 mi upstream from mouth.	6.23	1953-54, 1957, 1970-73	8-09-89	1.0
03576225 Little Limestone Creek	Limestone Creek	Lat 34°54'13", long 86°47'20", in NE¼NW¼NE¼ sec. 1, T. 2 S., R. 3 W., Limestone County, 100 ft downstream from Tyrone Creek, 0.3 mi west of Madison County line, 0.5 mi upstream from mouth, and 3.2 mi west of Toney.	33.9	1972-73, 1975	8-09-89	8.7
03576234 Leslie Branch	Limestone Creek	Lat 34°51'36", long 86°53'23", on line between secs. 19 and 20, T. 2 S., T. 2 W., Madison County, at county road, 0.8 mi northwest of Harvest, 1.0 mi west of Old Railroad Bed Road, and 1.2 mi east of Limestone County line.	--	--	8-09-89	0
03576235 Leslie Branch	Limestone Creek	Lat 34°51'14", long 86°47'04", in SW¼SW¼NW¼ sec. 19, T. 2 S., R. 2 W., Madison County, at bridge on Love Branch Road, 300 ft upstream from Love Ditch, and 2.4 mi west of Harvest.	4.95	1970-73	8-09-89	2.8
03576236 Love Ditch	Leslie Branch	Lat 34°51'06", long 86°47'05", in NE¼NE¼SE¼ sec. 24, T. 2 S., R. 3 W., Madison County, at bridge on County Line Road (Love Branch Road), 2.6 mi west of Harvest.	--	1970	8-09-89	0
03576245 Copperrun Branch	Limestone Creek	Lat 34°46'23", long 86°47'43", in NE¼ sec. 14, T. 3 S., R. 3 W., Limestone County, at bridge on Capshaw Road, 0.4 mi upstream from mouth and at Capshaw.	7.3	1970-73	8-09-89	*5.0

See footnotes at end of table.

Discharge measurements made at miscellaneous sites during water year 1989--Continued

					Measurements	
Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Date	Discharge (ft^3/s)
		Tennessee River basin--Continued				
0357624550 Knox Creek	Limestone Creek	Lat 34°45'26", long 86°43'32", on line between secs. 29 and 30, T. 3 S., R. 2 W., Limestone County, at Culverton on Balch Road, 2.5 mi above mouth, and 2.8 mi southeast of Capshaw.	--	--	8-09-89	*0.7
03576246 Knox Creek	Limestone Creek	Lat 34°46'23", long 86°45'50", on line between secs. 17 and 20, T. 3 S., R. 2 W., Limestone County, at Culverton Capshaw Road, 0.5 mi west of Nebo, and 2.1 mi east of Capshaw.	--	--	8-09-89	*.4

‡ Operated as a continuous-record station.
† Operated as a crest stage station.
* Base flow.
[a] Discharge may be affected by well pumpage.
[b] Not previously published.
[c] Regulated by hydropower reservoir(s).
[d] Published as regular gaging station.
[e] Published as low-flow partial-record station.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02423403 UNNAMED TRIB. TO SHEPHARD BRANCH NEAR LEEDS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 17...	0930	0.08	380	--	7.50	12.5	752	6.8	65	130	480
DEC 19...	1440	.06	365	--	--	5.0	751	13.0	103	31	79
JAN 19...	1030	1.6	325	336	7.70	9.0	750	10.5	92	130	130
FEB 23...	0940	.73	345	--	7.70	5.0	752	11.9	94	210	200
MAR 23...	1030	5.3	213	--	7.20	10.5	744	9.9	91	2100	2500
APR 21...	1015	.67	300	302	8.10	17.0	745	10.2	108	4000	110
MAY 16...	1230	.08	330	--	8.30	17.0	746	8.6	91	190	480
JUN 20...	1315	.13	350	--	7.80	20.5	743	6.9	79	440	3300
JUL 19...	1100	.40	335	--	7.50	21.5	743	8.5	99	2200	2800

DATE	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)
NOV 17...	--	--	--	--	--	--	--	--	--	210	--
DEC 19...	--	--	--	--	--	--	--	--	--	--	--
JAN 19...	170	4	64	3.3	1.6	2	0.1	0.90	7.93	170	6.9
FEB 23...	--	--	--	--	--	--	--	--	--	180	--
MAR 23...	--	--	--	--	--	--	--	--	--	110	--
APR 21...	160	0	59	3.0	1.6	2	.1	.50	8.14	160	4.3
MAY 16...	--	--	--	--	--	--	--	--	--	170	--
JUN 20...	--	--	--	--	--	--	--	--	--	184	--
JUL 19...	--	--	--	--	--	--	--	--	--	172	--

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
JAN 19...	2.9	0.10	7.5	200	189	0.27	0.86	0.290	0.010	0.300	<.010
APR 21...	2.4	.10	6.6	171	173	.23	.31	.020	.010	.030	<.010
JUL 19...	--	--	--	--	--	--	--	--	<.010	.080	<.010

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
JAN 19...	0.28	0.58	0.050	0.010	0.04	<20	160	20	40	20
APR 21...	<.20	--	.020	<.010	.02	<20	230	20	30	20
JUL 19...	.26	.34	.020	.010	.01	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02423404 SHEPHARD BRANCH NEAR LEEDS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 18...	1045	0.05	400	--	7.50	16.0	749	6.8	70	--	--
NOV 17...	1000	.43	150	--	6.80	13.5	752	8.8	86	120	57
DEC 20...	1230	.28	215	--	6.90	11.5	751	10.0	93	56	14
JAN 18...	1530	5.4	101	104	6.80	11.0	751	9.8	90	10	26
FEB 22...	1320	5.9	67	--	6.70	10.0	746	10.1	91	52	120
MAR 22...	0930	12	61	--	7.00	12.0	749	10.0	94	140	150
APR 21...	1230	1.6	185	166	7.40	17.5	745	8.8	94	240	36
MAY 16...	1315	.25	255	--	7.40	17.0	746	8.2	87	62	240
JUN 20...	1415	1.5	93	--	7.10	20.5	743	7.9	90	250	1600
JUL 19...	1230	.86	210	--	7.10	20.0	744	7.1	80	K1900	K1100
SEP 19...	0900	.04	390	--	7.70	17.5	746	7.6	81	K39	130

DATE	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 18...	--	--	--	--	--	--	--	--	--	220	--
NOV 17...	--	--	--	--	--	--	--	--	--	75	--
DEC 20...	--	--	--	--	--	--	--	--	--	110	--
JAN 18...	46	2	16	1.4	1.4	6	0.1	0.60	7.33	44	4.5
FEB 22...	--	--	--	--	--	--	--	--	--	26	--
MAR 22...	--	--	--	--	--	--	--	--	--	28	--
APR 21...	80	3	29	1.9	1.6	4	.1	.60	7.46	77	4.4
MAY 16...	--	--	--	--	--	--	--	--	--	130	--
JUN 20...	--	--	--	--	--	--	--	--	--	41	--
JUL 19...	--	--	--	--	--	--	--	--	--	105	--
SEP 19...	--	--	--	--	--	--	--	--	--	207	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02423404 SHEPHARD BRANCH NEAR LEEDS, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
OCT 18...	--	--	--	--	--	--	--	0.160	0.010	0.170	0.010
JAN 18...	1.5	0.10	8.3	77	60	0.10	1.12	.030	.010	.040	<.010
APR 21...	1.8	.10	8.6	92	94	.13	.40	.030	<.010	.040	<.010
JUL 19...	--	--	--	--	--	--	--	.070	<.010	.080	<.010

DATE	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 18...	<.20	--	0.020	0.010	0.01	--	--	--	--	--
JAN 18...	<.20	--	<.020	.010	--	<20	270	50	20	10
APR 21...	.72	0.76	.010	<.010	.01	<20	350	20	20	10
JUL 19...	<.20	--	.030	.010	.02	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02423405 LAKE PURDY AT IRONDALE BRIDGE NEAR LEEDS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (IN)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT												
18...	1215	--	--	235	255	8.40	210.0	--	749	9.3	--	--
NOV												
16...	1200	--	--	280	--	7.90	17.0	--	745	11.6	123	25
DEC												
19...	1130	--	--	280	--	--	9.0	--	752	11.0	96	4
JAN												
17...	1300	--	--	258	265	7.60	11.0	--	754	8.7	80	660
FEB												
21...	0845	--	--	315	--	7.70	12.0	--	740	9.5	91	65
MAR												
21...	1130	--	--	300	--	7.70	17.0	--	745	8.8	93	110
APR												
17...	0840	--	--	265	284	8.10	17.0	--	748	11.4	120	100
MAY												
15...	1200	--	--	250	--	7.80	20.5	--	745	8.6	98	K9
24...	1235	75.0	--	245	--	8.20	27.0	--	--	8.3	--	--
24...	1236	75.0	5.0	247	--	8.10	25.0	--	--	8.7	--	--
24...	1237	75.0	10.0	333	--	7.40	22.0	--	--	5.4	--	--
24...	1238	75.0	12.0	348	--	7.20	21.5	--	--	3.4	--	--
24...	1240	50.0	--	246	--	8.20	26.5	--	--	8.2	--	--
24...	1241	50.0	5.0	248	--	8.20	25.0	--	--	8.5	--	--
24...	1242	50.0	10.0	294	--	7.60	22.5	--	--	7.2	--	--
24...	1243	50.0	15.0	359	--	7.30	21.0	--	--	3.5	--	--
24...	1245	25.0	--	245	--	8.20	26.5	35.0	--	7.9	--	--
24...	1246	25.0	5.0	249	--	8.20	25.0	--	--	7.9	--	--
24...	1247	25.0	10.0	294	--	7.60	22.5	--	--	6.5	--	--
24...	1248	25.0	14.0	300	--	7.50	22.5	--	--	6.0	--	--
JUN												
19...	1345	--	--	230	--	8.20	27.0	--	744	8.2	106	31
JUL												
17...	0900	--	--	220	298	7.90	27.5	--	744	8.2	107	K6
AUG												
02...	1245	75.0	--	209	--	7.70	31.0	--	--	7.9	--	--
02...	1246	75.0	5.0	212	--	7.40	30.0	--	--	7.0	--	--
02...	1247	75.0	7.0	243	--	7.60	29.0	--	--	5.6	--	--
02...	1248	75.0	10.0	217	--	7.50	27.0	--	--	3.9	--	--
02...	1249	75.0	12.0	347	--	7.50	25.5	--	--	4.1	--	--
02...	1253	50.0	--	206	--	8.60	31.0	--	--	7.7	--	--
02...	1254	50.0	5.0	207	--	8.40	31.0	--	--	7.9	--	--
02...	1255	50.0	7.0	252	--	7.90	29.0	--	--	6.2	--	--
02...	1256	50.0	10.0	319	--	7.70	26.5	--	--	4.9	--	--
02...	1257	50.0	12.0	334	--	7.80	25.5	--	--	4.0	--	--
02...	1258	50.0	15.0	348	--	7.60	24.5	--	--	3.7	--	--
02...	1300	25.0	--	207	--	8.10	31.0	29.5	--	8.1	--	--
02...	1301	25.0	5.0	215	--	7.90	30.5	--	--	7.4	--	--
02...	1302	25.0	7.0	254	--	7.80	29.0	--	--	6.2	--	--
02...	1303	25.0	10.0	288	--	7.90	27.5	--	--	4.4	--	--
02...	1304	25.0	12.0	321	--	7.90	26.5	--	--	4.0	--	--
22...	1245	--	--	250	--	8.20	29.0	--	745	7.6	101	K13
SEP												
18...	0900	--	--	240	--	8.00	25.0	--	745	8.3	103	K13

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02423405 LAKE PURDY AT IRONDALE BRIDGE NR LEEDS, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 18...	--	110	13	36	5.6	4.6	8	0.2	5.0	8.20	100	17
NOV 16...	27	--	--	--	--	--	--	--	--	--	140	--
DEC 19...	7	--	--	--	--	--	--	--	--	--	--	--
JAN 17...	260	130	17	44	4.0	3.0	5	.1	3.2	7.95	110	15
FEB 21...	20	--	--	--	--	--	--	--	--	--	150	--
MAR 21...	120	--	--	--	--	--	--	--	--	--	150	--
APR 17...	K18	140	7	48	4.2	3.6	5	.1	3.5	7.88	130	13
MAY 15...	K10	--	--	--	--	--	--	--	--	--	140	--
JUN 19...	46	--	--	--	--	--	--	--	--	--	113	--
JUL 17...	K20	140	22	49	4.6	3.5	5	.1	3.8	7.56	120	14
AUG												
SEP 18...	K3	--	--	--	--	--	--	--	--	--	110	--

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
OCT 18...	4.3	0.10	0.30	153	133	0.21	0	0.030	<.010	0.040	.010	0.56
JAN 17...	3.6	<.10	8.0	153	147	.21	0	.410	.020	.430	.040	.32
APR 17...	3.6	.20	5.4	155	159	.21	0	.210	.020	.230	<.010	--
JUL 17...	3.6	.20	7.0	175	158	.24	0	.280	.010	.290	.020	.77

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
OCT 18...	0.57	0.61	0.050	0.020	0.03	--	--	30	--	--	--	--
JAN 17...	.36	.79	.060	.040	.02	--	--	20	--	--	--	--
APR 17...	.50	.73	.040	.010	.03	1	<1	<20	<1	<1	<1	<1
JUL 17...	.79	1.1	.050	.020	.03	--	--	<20	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT 18...	200	20	--	--	20	<10	--	--	--	--	--	--
JAN 17...	320	70	--	--	38	22	--	--	--	--	--	--
APR 17...	270	20	10	<5	40	10	<.10	0.1	<1	<1	1	<1.0
JUL 17...	290	10	--	--	60	10	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

0242340575 LEE BRANCH NEAR CAHABA HEIGHTS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 16...	1455	0.50	150	--	6.50	16.5	745	5.6	59	3400	900
DEC 19...	1300	.02	175	--	--	7.5	752	9.7	82	5	2
JAN 18...	0945	4.1	74	77	6.50	7.5	751	11.2	95	800	72
FEB 22...	0915	4.1	73	--	6.10	9.5	746	10.2	91	79	220
MAR 22...	1215	9.3	56	--	6.60	14.0	749	9.8	97	100	260
APR 19...	0845	1.2	114	117	6.80	15.5	744	8.2	84	140	170
MAY 16...	0900	.19	138	--	6.70	15.5	746	7.6	78	370	870
JUN 19...	0930	39	52	--	6.30	21.5	744	7.8	91	--	--
JUL 19...	0845	.51	148	--	6.70	22.0	743	7.1	83	6000	2200

DATE	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	PH LAB (STANDARD UNITS)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DISSOLVED (MG/L AS SO4)
NOV 16...	--	--	--	--	--	--	--	--	--	59	--
DEC 19...	--	--	--	--	--	--	--	--	--	--	--
JAN 18...	30	9	8.3	2.2	1.9	12	0.2	1.0	7.04	21	8.8
FEB 22...	--	--	--	--	--	--	--	--	--	23	--
MAR 22...	--	--	--	--	--	--	--	--	--	15	--
APR 19...	51	5	16	2.7	2.3	9	.1	1.0	7.22	46	7.3
MAY 16...	--	--	--	--	--	--	--	--	--	56	--
JUN 19...	--	--	--	--	--	--	--	--	--	16	--
JUL 19...	--	--	--	--	--	--	--	--	--	61	--

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
JAN 18...	2.2	0.10	6.8	58	44	0.08	0.64	0.760	0.020	0.780	0.070
APR 19...	2.5	.10	6.2	54	66	.07	.17	.070	.010	.080	<.010
JUL 19...	--	--	--	--	--	--	--	.080	.020	.100	.020

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
JAN 18...	0.19	0.26	1.0	0.040	0.020	0.02	<20	1200	150	40	30
APR 19...	--	.24	.32	.020	.020	0	<20	1300	100	50	40
JUL 19...	.30	.32	.42	.050	.050	0	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02423406 LAKE PURDY AT HIGHWAY 119 NEAR CAHABA HEIGHTS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT												
18...	1330	--	--	288	309	7.90	21.0	--	749	8.3	95	--
NOV												
16...	1245	--	--	249	--	7.30	17.5	--	745	8.4	90	170
DEC												
19...	1200	--	--	250	--	--	9.0	--	752	10.1	89	9
JAN												
17...	1345	--	--	108	119	6.70	11.0	--	751	7.8	72	49
FEB												
21...	0930	--	--	160	--	7.20	12.0	--	740	8.9	85	2900
MAR												
21...	1200	--	--	104	--	7.00	17.0	--	745	8.2	87	2300
APR												
17...	1030	--	--	160	156	7.40	17.0	--	748	8.1	85	K20
MAY												
15...	1215	--	--	235	--	7.30	20.5	--	745	8.2	93	130
24...	1035	65.0	--	237	--	7.80	26.0	--	--	6.8	--	--
24...	1036	65.0	5.0	239	--	7.80	25.0	--	--	6.0	--	--
24...	1045	35.0	--	239	--	7.80	26.5	--	--	7.2	--	--
24...	1046	35.0	5.0	235	--	7.60	25.0	--	--	6.0	--	--
24...	1047	35.0	10.0	190	--	7.20	22.0	--	--	1.6	--	--
JUN												
19...	1145	--	--	223	--	7.30	24.5	--	744	6.5	80	61
JUL												
17...	0945	--	--	200	208	7.50	27.5	--	745	6.8	88	K23
AUG												
02...	1030	35.0	--	226	--	7.30	30.0	24.0	--	4.6	--	--
02...	1031	35.0	5.0	224	--	7.50	29.0	--	--	5.1	--	--
02...	1032	35.0	7.0	229	--	6.90	28.5	--	--	2.0	--	--
02...	1033	35.0	10.0	235	--	6.80	27.5	--	--	0.5	--	--
02...	1035	65.0	--	224	--	7.70	30.0	--	--	5.9	--	--
02...	1036	65.0	5.0	226	--	7.60	28.5	--	--	3.0	--	--
22...	1215	--	--	260	--	7.90	29.0	--	745	7.4	99	K6
SEP												
18...	1000	--	--	245	--	7.80	24.5	--	745	8.2	101	49

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT												
18...	--	150	3	54	4.3	2.4	3	0.1	1.8	7.90	150	8.3
NOV												
16...	130	--	--	--	--	--	--	--	--	--	130	--
DEC												
19...	5	--	--	--	--	--	--	--	--	--	--	--
JAN												
17...	67	51	5	17	2.1	1.6	6	.1	1.0	7.28	46	6.8
FEB												
21...	2300	--	--	--	--	--	--	--	--	--	74	--
MAR												
21...	1100	--	--	--	--	--	--	--	--	--	46	--
APR												
17...	K2	75	6	26	2.4	1.8	5	.1	1.1	7.83	69	5.9
MAY												
15...	450	--	--	--	--	--	--	--	--	--	100	--
JUN												
19...	37	--	--	--	--	--	--	--	--	--	103	--
JUL												
17...	K13	96	2	33	3.2	2.2	5	.1	2.1	7.33	93	7.2
AUG												
22...	K1	--	--	--	--	--	--	--	--	--	112	--
SEP												
18...	69	--	--	--	--	--	--	--	--	--	108	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02423406 LAKE PURDY AT HIGHWAY 119 NEAR CAHABA HEIGHTS, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
OCT												
18...	2.3	0.10	4.6	184	168	0.25	0	0.010	<.010	<.020	0.010	0.54
JAN												
17...	2.2	.10	7.3	75	66	.10	0	.060	.020	.080	<.010	--
APR												
17...	2.3	.20	5.3	88	87	.12	0	.020	.010	.030	<.010	--
JUL												
17...	2.4	.20	7.1	128	114	.17	0	.010	<.010	.020	<.010	--

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
OCT												
18...	0.55	--	0.070	0.010	0.06	--	--	<20	--	--	--	--
JAN												
17...	.34	0.42	.060	.030	.03	--	--	20	--	--	--	--
APR												
17...	.51	.54	.030	.010	.02	<1	<1	<20	1	<1	1	<1
JUL												
17...	.67	.69	.050	.020	.03	--	--	<20	--	--	--	--

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)
OCT												
18...	830	20	--	--	80	40	--	--	--	--	--	--
JAN												
17...	430	120	--	--	40	30	--	--	--	--	--	--
APR												
17...	640	70	<5	<5	70	30	<.10	<.1	<1	<1	1	<1.0
JUL												
17...	570	<10	--	--	190	80	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02423406O4 LAKE PURDY CROSS-SECTION C NEAR CAHABA HEIGHTS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	OXYGEN, DIS-SOLVED (MG/L)
MAY								
24...	1050	25.0	--	240	8.30	25.0	63.4	9.2
24...	1051	25.0	5.0	239	8.30	24.5	--	9.0
24...	1052	25.0	10.0	238	7.90	22.5	--	7.5
24...	1053	25.0	14.0	250	7.40	20.5	--	3.1
24...	1055	50.0	--	239	8.40	25.5	--	9.0
24...	1056	50.0	5.0	238	8.30	24.5	--	9.0
24...	1057	50.0	10.0	238	8.10	23.0	--	8.0
24...	1058	50.0	15.0	256	7.40	19.5	--	3.1
24...	1100	75.0	--	240	8.30	25.5	--	9.2
24...	1101	75.0	5.0	238	8.10	25.0	--	8.4
24...	1102	75.0	9.0	239	8.10	23.5	--	7.4
AUG								
02...	1045	25.0	--	213	8.40	30.0	35.5	7.2
02...	1046	25.0	5.0	215	8.00	29.5	--	7.3
02...	1047	25.0	7.0	221	7.80	29.0	--	6.8
02...	1048	25.0	11.0	239	7.20	26.0	--	1.9
02...	1050	50.0	--	215	8.30	30.0	--	7.7
02...	1051	50.0	5.0	215	8.20	29.5	--	7.7
02...	1052	50.0	7.0	218	7.90	29.0	--	7.3
02...	1053	50.0	10.0	236	7.10	26.0	--	3.8
02...	1054	50.0	12.0	252	6.90	25.0	--	2.7
02...	1055	50.0	14.0	259	7.00	24.0	--	1.6
02...	1100	75.0	--	215	8.60	30.0	--	7.3
02...	1101	75.0	5.0	215	8.20	29.5	--	7.3
02...	1102	75.0	7.0	224	7.70	28.5	--	5.8
02...	1103	75.0	10.0	232	7.40	26.5	--	3.3
02...	1104	75.0	12.0	252	7.00	24.5	--	.5
02...	1105	75.0	16.0	262	7.00	23.0	--	.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

0242340606 LAKE PURDY CROSS-SECTION B NEAR CAHABA HEIGHTS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (IN)	OXYGEN, DISSOLVED (MG/L)
MAY								
24...	1105	25.0	--	240	8.40	25.5	61.3	9.4
24...	1106	25.0	5.0	238	8.40	24.5	--	9.4
24...	1107	25.0	10.0	244	8.10	23.0	--	8.2
24...	1108	25.0	15.0	263	7.40	19.0	--	4.3
24...	1109	25.0	20.0	248	7.30	16.0	--	.6
24...	1110	25.0	25.0	243	7.20	14.5	--	.4
24...	1115	50.0	--	240	8.40	25.0	--	9.1
24...	1116	50.0	5.0	237	8.30	24.5	--	9.1
24...	1117	50.0	10.0	243	8.10	22.0	--	8.1
24...	1118	50.0	15.0	265	7.40	19.0	--	3.2
24...	1119	50.0	20.0	253	7.40	16.0	--	.7
24...	1120	50.0	25.0	243	7.20	14.0	--	.4
24...	1125	75.0	--	240	8.30	25.5	--	9.0
24...	1126	75.0	5.0	239	8.30	24.5	--	9.0
24...	1127	75.0	10.0	244	8.20	22.0	--	8.2
24...	1128	75.0	15.0	270	7.30	18.0	--	3.0
24...	1129	75.0	20.0	249	7.30	16.0	--	.5
24...	1130	75.0	22.0	245	7.20	15.0	--	.2
AUG								
02...	1100	25.0	--	212	7.50	30.5	38.0	7.9
02...	1101	25.0	5.0	212	7.50	30.0	--	8.3
02...	1102	25.0	7.0	222	8.60	28.5	--	8.1
02...	1103	25.0	10.0	243	8.30	26.5	--	6.1
02...	1104	25.0	12.0	259	7.50	25.0	--	3.5
02...	1105	25.0	15.0	263	7.30	24.0	--	.7
02...	1106	25.0	17.0	257	7.80	22.5	--	.2
02...	1107	25.0	20.0	252	7.50	20.5	--	.2
02...	1108	25.0	26.0	255	7.40	18.0	--	.1
02...	1110	50.0	--	210	8.50	30.5	--	8.0
02...	1111	50.0	5.0	215	8.40	30.0	--	8.1
02...	1112	50.0	7.0	227	8.20	28.5	--	8.1
02...	1113	50.0	10.0	237	7.50	26.5	--	5.5
02...	1114	50.0	12.0	274	6.90	25.0	--	3.2
02...	1115	50.0	15.0	266	7.00	23.5	--	.8
02...	1116	50.0	17.0	254	7.00	22.5	--	.3
02...	1117	50.0	20.0	254	7.40	20.5	--	.1
02...	1118	50.0	22.0	252	7.60	20.0	--	.1
02...	1120	75.0	--	207	8.20	30.5	--	8.1
02...	1121	75.0	5.0	212	8.10	30.0	--	8.0
02...	1122	75.0	7.0	228	7.90	28.0	--	8.0
02...	1123	75.0	10.0	235	7.80	27.0	--	6.4
02...	1124	75.0	12.0	265	7.10	25.0	--	2.3
02...	1125	75.0	14.0	269	7.70	24.5	--	1.4

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02423407 UNNAMED TRIB. TO IKE POND SLOUGH NEAR CAHABA HEIGHTS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
JAN 19...	0930	0.01	--	108	6.40	7.0	750	7.6	64	34	130
MAR 21...	1350	.20	57	--	6.80	14.0	745	5.4	54	120	500
APR 19...	0945	.15	149	153	6.90	15.5	744	4.6	47	K17	K20
MAY 15...	1310	.06	175	--	7.00	19.0	745	4.8	53	K5	99
JUN 19...	1510	.01	210	--	7.00	21.0	744	3.5	40	1200	2500
JUL 17...	1100	.13	200	--	6.70	20.0	745	3.4	38	120	120

DATE	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	PH LAB (STANDARD UNITS)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DISSOLVED (MG/L AS SO4)
JAN 19...	50	4	17	1.8	0.80	3	0	0.60	7.31	46	4.7
MAR 21...	--	--	--	--	--	--	--	--	--	61	--
APR 19...	74	2	26	2.3	1.1	3	.1	.40	7.19	73	4.1
MAY 15...	--	--	--	--	--	--	--	--	--	85	--
JUN 19...	--	--	--	--	--	--	--	--	--	108	--
JUL 17...	--	--	--	--	--	--	--	--	--	102	--

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
JAN 19...	1.9	0.10	6.8	72	61	0.10	0.00	0.110	0.010	0.120	<.010
APR 19...	1.8	.20	6.6	79	86	.11	.03	.010	<.010	.020	<.010
JUL 17...	--	--	--	--	--	--	--	.020	<.010	.030	.010

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
JAN 19...	0.26	0.38	0.020	0.010	0.01	<20	100	50	20	<10
APR 19...	.22	.24	.020	<.010	.02	<20	240	50	120	50
JUL 17...	<.20	--	<.020	.010	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

0242340710 LAKE PURDY CROSS-SECTION A NEAR CAHABA HEIGHTS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	OXYGEN, DIS-SOLVED (MG/L)
MAY								
24...	1200	25.0	--	241	8.30	26.5	75.3	9.4
24...	1201	25.0	5.0	238	8.20	24.5	--	9.3
24...	1202	25.0	10.0	236	8.20	23.0	--	9.3
24...	1203	25.0	15.0	256	7.60	19.5	--	6.5
24...	1204	25.0	20.0	252	7.30	17.0	--	1.0
24...	1205	25.0	25.0	241	7.20	15.0	--	.5
24...	1206	25.0	30.0	241	7.20	14.0	--	.3
24...	1207	25.0	35.0	249	7.10	13.5	--	.3
24...	1210	50.0	--	239	8.30	26.0	--	8.7
24...	1211	50.0	5.0	238	8.30	24.5	--	9.3
24...	1212	50.0	10.0	236	8.30	23.5	--	9.5
24...	1213	50.0	15.0	261	7.60	19.5	--	6.3
24...	1214	50.0	20.0	256	7.10	17.0	--	1.1
24...	1215	50.0	25.0	241	7.10	14.5	--	.4
24...	1216	50.0	30.0	240	7.10	14.0	--	.2
24...	1220	75.0	--	238	8.30	26.0	--	9.0
24...	1221	75.0	5.0	237	8.30	24.5	--	9.1
24...	1222	75.0	10.0	240	8.30	23.0	--	9.3
24...	1224	75.0	15.0	257	7.60	19.0	--	6.0
24...	1225	75.0	25.0	240	7.20	14.5	--	1.0
24...	1226	75.0	31.0	241	7.20	13.5	--	.5
AUG								
02...	1155	25.0	--	210	8.60	30.0	43.5	8.1
02...	1156	25.0	5.0	212	8.50	29.5	--	8.7
02...	1157	25.0	7.0	213	8.50	29.0	--	8.4
02...	1158	25.0	10.0	223	8.10	27.0	--	7.8
02...	1159	25.0	12.0	252	7.40	25.0	--	4.4
02...	1200	25.0	15.0	263	7.20	23.5	--	.9
02...	1201	25.0	17.0	251	7.10	22.5	--	.2
02...	1202	25.0	20.0	249	7.20	20.5	--	.1
02...	1203	25.0	25.0	252	7.60	18.0	--	.1
02...	1204	25.0	30.0	247	7.80	15.5	--	.1
02...	1205	25.0	35.0	243	7.60	15.0	--	.1
02...	1206	25.0	38.0	256	7.50	15.0	--	.1
02...	1210	50.0	--	211	8.70	30.0	--	8.2
02...	1211	50.0	5.0	210	8.70	30.0	--	8.3
02...	1212	50.0	7.0	218	8.60	29.0	--	9.2
02...	1213	50.0	10.0	236	8.40	26.5	--	7.9
02...	1214	50.0	12.0	253	7.20	25.0	--	5.5
02...	1215	50.0	15.0	259	6.60	23.5	--	1.0
02...	1216	50.0	17.0	255	7.50	22.5	--	.3
02...	1217	50.0	20.0	250	7.30	21.0	--	.2
02...	1218	50.0	25.0	253	7.50	18.0	--	.1
02...	1219	50.0	30.0	248	7.60	16.0	--	.1
02...	1220	50.0	36.0	245	7.40	15.0	--	.1
02...	1225	75.0	--	212	7.70	30.0	--	7.3
02...	1226	75.0	5.0	212	7.90	30.0	--	7.8
02...	1227	75.0	7.0	220	8.20	29.5	--	8.4
02...	1228	75.0	10.0	238	8.20	27.0	--	8.7
02...	1229	75.0	12.0	258	7.70	25.0	--	5.2
02...	1230	75.0	15.0	266	7.60	23.5	--	3.2
02...	1231	75.0	17.0	253	7.40	22.0	--	2.8
02...	1232	75.0	20.0	251	7.20	20.5	--	2.7
02...	1233	75.0	25.0	252	7.30	17.0	--	.7
02...	1234	75.0	30.0	249	7.70	15.5	--	.3
02...	1235	75.0	35.0	243	7.60	15.0	--	.3
02...	1236	75.0	38.0	249	7.50	15.0	--	.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

0242340750 LAKE PURDY CROSS-SECTION E NEAR CAHABA HEIGHTS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (MG/L)
MAY								
24...	1009	25.0	--	241	8.30	25.0	63.0	9.0
24...	1010	25.0	5.0	239	8.30	24.5	--	8.8
24...	1011	25.0	10.0	240	8.20	23.0	--	8.4
24...	1012	25.0	15.0	250	7.40	19.0	--	3.3
24...	1013	25.0	20.0	240	7.40	16.0	--	.8
24...	1015	50.0	--	240	8.30	25.0	--	8.5
24...	1016	50.0	5.0	240	8.30	24.5	--	8.3
24...	1017	50.0	10.0	240	8.10	23.0	--	8.0
24...	1018	50.0	15.0	252	7.50	19.0	--	3.1
24...	1019	50.0	20.0	238	7.40	16.0	--	.5
24...	1020	50.0	25.0	239	7.30	14.5	--	.3
24...	1021	50.0	30.0	244	7.20	14.0	--	.2
24...	1022	50.0	35.0	243	7.20	13.5	--	.2
24...	1023	50.0	38.0	244	7.20	13.5	--	.2
24...	1025	75.0	--	240	8.40	25.5	--	8.9
24...	1026	75.0	5.0	240	8.40	25.0	--	8.5
24...	1027	75.0	10.0	240	8.10	22.5	--	7.7
24...	1028	75.0	15.0	251	7.50	19.0	--	3.4
24...	1029	75.0	20.0	240	7.30	16.0	--	.3
24...	1030	75.0	25.0	240	7.30	14.5	--	.3
AUG								
02...	1000	25.0	--	212	8.40	29.5	43.5	7.3
02...	1001	25.0	5.0	214	8.20	29.5	--	7.4
02...	1002	25.0	7.0	219	8.10	28.0	--	6.7
02...	1003	25.0	10.0	231	7.50	26.5	--	4.2
02...	1004	25.0	12.0	243	7.20	24.5	--	1.5
02...	1005	25.0	15.0	242	7.10	23.0	--	.5
02...	1006	25.0	18.0	243	7.10	21.5	--	.9
02...	1010	50.0	--	212	8.30	29.5	--	7.7
02...	1011	50.0	5.0	213	8.20	29.5	--	7.7
02...	1012	50.0	7.0	219	8.00	28.5	--	7.7
02...	1013	50.0	10.0	232	7.90	26.5	--	4.3
02...	1014	50.0	12.0	243	7.90	25.0	--	2.3
02...	1015	50.0	15.0	241	7.00	23.0	--	.4
02...	1016	50.0	17.0	241	7.00	22.0	--	.2
02...	1017	50.0	20.0	245	7.30	20.5	--	.1
02...	1018	50.0	25.0	255	7.70	17.5	--	.1
02...	1019	50.0	30.0	248	7.70	15.5	--	.1
02...	1020	50.0	35.0	245	7.70	15.0	--	.1
02...	1021	50.0	41.0	246	7.40	15.0	--	.1
02...	1025	75.0	--	214	7.70	29.5	--	7.8
02...	1026	75.0	5.0	213	7.60	29.5	--	7.7
02...	1027	75.0	7.0	219	7.80	28.5	--	7.3
02...	1028	75.0	10.0	235	7.10	26.5	--	3.5
02...	1029	75.0	12.0	245	6.90	25.0	--	1.5
02...	1030	75.0	15.0	247	7.20	23.0	--	.4
02...	1031	75.0	17.0	251	7.20	22.0	--	.1
02...	1032	75.0	21.0	249	7.40	20.0	--	.1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02423408 LAKE PURDY CROSS-SECTION D NEAR CAHABA HEIGHTS, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	OXYGEN, DIS-SOLVED (MG/L)
MAY								
24...	0920	25.0	--	238	8.30	25.0	76.3	8.2
24...	0921	25.0	5.0	237	8.40	24.5	--	8.6
24...	0922	25.0	10.0	236	8.40	23.0	--	9.0
24...	0923	25.0	15.0	245	7.70	19.0	--	5.4
24...	0924	25.0	20.0	240	7.40	16.5	--	1.0
24...	0927	50.0	--	239	8.60	25.0	--	8.9
24...	0928	50.0	5.0	238	8.50	24.5	--	8.7
24...	0929	50.0	10.0	237	8.40	23.0	--	8.9
24...	0930	50.0	15.0	250	7.80	18.5	--	5.2
24...	0931	50.0	20.0	241	7.40	16.0	--	.7
24...	0932	50.0	25.0	241	7.30	14.5	--	.3
24...	0933	50.0	30.0	245	7.30	14.0	--	.3
24...	0934	50.0	35.0	245	7.20	13.5	--	.2
24...	0935	50.0	40.0	245	7.20	13.5	--	.2
24...	0936	50.0	44.0	245	7.20	13.5	--	.2
24...	0938	75.0	--	239	8.60	25.0	--	9.0
24...	0939	75.0	5.0	239	8.50	24.5	--	8.6
24...	0940	75.0	10.0	238	8.50	23.0	--	8.7
24...	0941	75.0	15.0	250	7.70	18.5	--	4.7
24...	0942	75.0	20.0	242	7.50	16.5	--	.8
24...	0943	75.0	25.0	240	7.30	14.5	--	.4
24...	0944	75.0	30.0	245	7.30	14.0	--	.3
24...	0945	75.0	35.0	245	7.30	13.5	--	.2
AUG								
02...	0900	25.0	--	212	8.30	29.0	48.0	7.9
02...	0901	25.0	5.0	211	8.40	29.0	--	7.9
02...	0902	25.0	7.0	212	8.30	29.0	--	7.8
02...	0903	25.0	10.0	225	7.60	25.5	--	4.6
02...	0904	25.0	12.0	232	7.30	24.5	--	2.5
02...	0905	25.0	15.0	232	7.50	23.5	--	1.1
02...	0906	25.0	17.0	234	7.40	21.5	--	.3
02...	0907	25.0	20.0	246	7.40	20.0	--	.1
02...	0908	25.0	25.0	252	7.40	17.0	--	.1
02...	0909	25.0	30.0	245	7.50	15.5	--	.1
02...	0910	25.0	35.0	241	7.50	15.0	--	.1
02...	0911	25.0	39.0	243	7.50	15.0	--	.1
02...	0915	50.0	--	213	8.50	29.5	--	7.8
02...	0916	50.0	5.0	213	8.40	29.0	--	7.6
02...	0917	50.0	7.0	213	8.50	29.0	--	7.3
02...	0918	50.0	10.0	227	7.90	25.5	--	4.6
02...	0919	50.0	12.0	232	7.50	25.0	--	3.0
02...	0920	50.0	15.0	233	7.30	23.5	--	1.3
02...	0921	50.0	17.0	233	7.10	22.5	--	.4
02...	0922	50.0	20.0	245	7.10	20.0	--	.2
02...	0923	50.0	25.0	252	7.30	17.5	--	.2
02...	0924	50.0	30.0	244	7.60	15.5	--	.1
02...	0925	50.0	35.0	243	7.20	15.0	--	.1
02...	0926	50.0	40.0	243	7.10	15.0	--	.1
02...	0927	50.0	46.0	243	7.10	15.0	--	.1
02...	0930	75.0	--	215	8.10	29.5	--	7.4
02...	0931	75.0	5.0	214	8.10	29.0	--	7.9
02...	0932	75.0	7.0	215	8.10	29.0	--	7.3
02...	0933	75.0	10.0	228	7.60	26.5	--	4.7
02...	0934	75.0	12.0	232	7.10	25.0	--	2.7
02...	0935	75.0	15.0	232	6.90	23.5	--	1.2
02...	0936	75.0	17.0	234	<7.00	22.5	--	.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02441498 TOMBIGBEE RIVER IN COLUMBUS BENDWAY AT COLUMBUS, MS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMPLING DEPTH (FEET)	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)
DEC										
05...	1300	--	--	--	110	94	7.20	10.5	60	24
05...	1301	--	5.0	--	110	--	--	10.0	--	--
05...	1302	--	10.0	--	115	--	--	10.0	--	--
05...	1303	--	12.0	--	115	--	--	10.0	--	--
FEB										
27...	1500	--	--	--	65	67	7.60	7.0	--	53
27...	1501	--	5.0	--	65	--	7.10	7.0	--	--
27...	1502	--	10.0	--	65	--	7.10	7.0	--	--
27...	1503	--	15.0	--	64	--	7.10	7.0	--	--
27...	1504	--	20.0	--	63	--	7.10	7.0	--	--
MAR										
05...	1255	50.0	--	9100	--	--	--	--	--	--
05...	1257	25.0	--	9100	--	--	--	--	--	--
05...	1300	75.0	--	9100	--	--	--	--	--	--
06...	1032	25.0	--	14200	--	--	--	--	--	--
06...	1035	75.0	--	14200	--	--	--	--	--	--
06...	1038	50.0	--	14200	--	--	--	--	--	--
07...	0920	75.0	--	6500	--	--	--	--	--	--
07...	0923	50.0	--	6500	--	--	--	--	--	--
07...	0925	25.0	--	6500	--	--	--	--	--	--
08...	0845	25.0	--	7100	--	--	--	--	--	--
08...	0855	50.0	--	7100	--	--	--	--	--	--
08...	0910	75.0	--	7100	--	--	--	--	--	--
JUN										
05...	1500	--	--	--	143	146	6.90	26.5	30	17
05...	1501	--	5.0	--	145	--	6.90	26.5	--	--
05...	1502	--	10.0	--	144	--	6.90	26.5	--	--
05...	1503	--	15.0	--	143	--	6.90	26.5	--	--
05...	1504	--	20.0	--	143	--	6.90	26.5	--	--
05...	1505	--	25.0	--	141	--	6.90	26.5	--	--
05...	1506	--	30.0	--	140	--	6.90	26.5	--	--
05...	1745	25.0	--	--	--	--	--	--	--	--
05...	1800	50.0	--	--	--	--	--	--	--	--
05...	1815	75.0	--	--	--	--	--	--	--	--
AUG										
07...	1345	--	--	--	124	130	7.50	29.5	20	23
07...	1347	--	5.0	--	124	--	7.10	29.5	--	--
07...	1348	--	10.0	--	124	--	7.00	29.5	--	--
07...	1349	--	15.0	--	123	--	7.00	29.5	--	--
07...	1350	--	20.0	--	124	--	7.00	29.5	--	--
07...	1351	--	25.0	--	122	--	7.00	29.5	--	--
07...	1352	--	26.0	--	121	--	7.00	29.5	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02441498 TOMBIGBEE RIVER IN COLUMBUS BENDWAY AT COLUMBUS, MS--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TRANS-PAR-ENCY (SECCHI DISK) (IN)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC										
05...	11.5	765	12.0	107	6.0	82	35	10	12	1.2
05...	--	--	11.6	--	--	--	--	--	--	--
05...	--	--	11.4	--	--	--	--	--	--	--
05...	--	--	11.4	--	--	--	--	--	--	--
FEB										
27...	10.5	746	16.4	138	5.9	270	24	8	8.2	.80
27...	--	--	15.7	--	--	--	--	--	--	--
27...	--	--	15.0	--	--	--	--	--	--	--
27...	--	--	15.0	--	--	--	--	--	--	--
27...	--	--	14.9	--	--	--	--	--	--	--
MAR										
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
JUN										
05...	11.8	754	9.1	115	2.4	K12	53	20	19	1.4
05...	--	--	8.8	--	--	--	--	--	--	--
05...	--	--	8.9	--	--	--	--	--	--	--
05...	--	--	9.1	--	--	--	--	--	--	--
05...	--	--	9.0	--	--	--	--	--	--	--
05...	--	--	8.9	--	--	--	--	--	--	--
05...	--	--	8.6	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
AUG										
07...	14.3	754	7.5	100	1.6	44	46	0	16	1.4
07...	--	--	7.4	--	--	--	--	--	--	--
07...	--	--	7.3	--	--	--	--	--	--	--
07...	--	--	7.2	--	--	--	--	--	--	--
07...	--	--	7.3	--	--	--	--	--	--	--
07...	--	--	7.2	--	--	--	--	--	--	--
07...	--	--	7.1	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02441498 TOMBIGBEE RIVER IN COLUMBUS BENDWAY AT COLUMBUS, MS--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PH LAB (STANDARD UNITS)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)
DEC										
05...	7.20	7.6	5.4	0.20	71	30	0.170	0.040	0.21	0.25
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
FEB										
27...	6.91	6.3	3.2	.20	49	50	.120	<.010	--	.36
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
MAR										
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
JUN										
05...	7.10	9.2	17	.30	113	48	.070	.060	.20	.26
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
AUG										
07...	7.03	7.6	11	.20	83	31	.020	.040	.17	.21
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02441498 TOMBIGBEE RIVER IN COLUMBUS BENDWAY AT COLUMBUS, MS--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)
DEC										
05...	0.080	0.020	0.08	0.02	--	--	<1	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
FEB										
27...	.100	.020	.10	.02	2100	100	1	0.600	<.100	--
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
MAR										
05...	--	--	--	--	--	--	--	--	--	182
05...	--	--	--	--	--	--	--	--	--	129
05...	--	--	--	--	--	--	--	--	--	151
06...	--	--	--	--	--	--	--	--	--	395
06...	--	--	--	--	--	--	--	--	--	410
06...	--	--	--	--	--	--	--	--	--	453
07...	--	--	--	--	--	--	--	--	--	163
07...	--	--	--	--	--	--	--	--	--	182
07...	--	--	--	--	--	--	--	--	--	186
08...	--	--	--	--	--	--	--	--	--	99
08...	--	--	--	--	--	--	--	--	--	98
08...	--	--	--	--	--	--	--	--	--	97
JUN										
05...	.080	.030	.08	.03	2000	190	<1	4.60	.400	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
AUG										
07...	.070	<.020	.07	--	1500	190	<1	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02441498 TOMBIGBEE RIVER IN COLUMBUS BENDWAY AT COLUMBUS, MS--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
DEC										
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
FEB										
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
MAR										
05...	4470	--	--	--	--	--	--	--	--	--
05...	3170	--	--	--	--	--	--	--	--	--
05...	3710	--	--	--	--	--	--	--	--	--
06...	15100	--	--	--	--	--	--	--	--	--
06...	15700	--	--	--	--	--	--	--	--	--
06...	17400	--	--	--	--	--	--	--	--	--
07...	2860	--	--	--	--	--	--	--	--	--
07...	3190	--	--	--	--	--	--	--	--	--
07...	3260	--	--	--	--	--	--	--	--	--
08...	1900	--	--	--	--	--	--	--	--	--
08...	1880	--	--	--	--	--	--	--	--	--
08...	1860	--	--	--	--	--	--	--	--	--
JUN										
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	1	7	19	68	76	79	81	86	98
05...	--	0	2	5	10	12	13	20	38	78
05...	--	15	29	33	36	39	45	56	74	95
AUG										
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02443610 TOMBIGBEE RIVER AT CAMP PRATT BELOW COLUMBUS, MS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	TRANSPARENCY (SECCHI DISK) (IN)	BAROMETRIC PRESSURE (MM OF HG)
DEC										
05...	1415	--	125	107	7.10	11.0	65	37	11.0	765
05...	1416	5.0	125	--	--	10.5	--	--	--	--
05...	1417	10.0	130	--	--	10.5	--	--	--	--
05...	1418	14.0	130	--	--	10.5	--	--	--	--
FEB										
28...	0845	--	89	91	7.50	7.0	--	58	9.50	757
28...	0846	5.0	88	--	7.40	7.0	--	--	--	--
28...	0847	10.0	88	--	7.40	7.0	--	--	--	--
28...	0848	15.0	89	--	7.30	7.0	--	--	--	--
28...	0849	20.0	88	--	7.30	7.0	--	--	--	--
28...	0850	25.0	88	--	7.40	7.0	--	--	--	--
JUN										
06...	1320	--	125	146	7.70	27.0	20	20	13.8	755
06...	1321	5.0	134	--	7.40	26.0	--	--	--	--
06...	1322	10.0	130	--	7.10	26.0	--	--	--	--
06...	1323	15.0	177	--	6.90	24.0	--	--	--	--
06...	1324	16.0	180	--	6.90	24.0	--	--	--	--
AUG										
08...	0930	--	149	--	7.30	28.5	30	22	15.2	756
08...	0931	5.0	145	--	7.20	28.5	--	--	--	--
08...	0932	10.0	137	--	7.20	28.0	--	--	--	--

DATE	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	PH LAB (STANDARD UNITS)
DEC									
05...	10.8	98	2.1	56	40	8	14	1.2	7.20
05...	10.4	--	--	--	--	--	--	--	--
05...	10.2	--	--	--	--	--	--	--	--
05...	10.0	--	--	--	--	--	--	--	--
FEB									
28...	15.0	124	7.0	600	36	9	13	.90	7.34
28...	14.1	--	--	--	--	--	--	--	--
28...	14.0	--	--	--	--	--	--	--	--
28...	13.7	--	--	--	--	--	--	--	--
28...	13.6	--	--	--	--	--	--	--	--
28...	13.5	--	--	--	--	--	--	--	--
JUN									
06...	9.4	120	5.2	--	60	13	22	1.2	7.20
06...	7.4	--	--	--	--	--	--	--	--
06...	6.1	--	--	--	--	--	--	--	--
06...	3.2	--	--	--	--	--	--	--	--
06...	1.9	--	--	--	--	--	--	--	--
AUG									
08...	7.5	97	1.5	K2	22	5	6.2	1.6	6.60
08...	5.2	--	--	--	--	--	--	--	--
08...	5.3	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02443610 TOMBIGBEE RIVER AT CAMP PRATT BELOW COLUMBUS, MS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)
DEC									
05...	7.1	4.3	0.20	72	29	0.150	0.070	0.24	0.31
FEB									
28...	8.0	3.4	.30	63	86	.180	.040	.29	.33
JUN									
06...	9.1	5.5	.30	102	34	.210	.030	.31	.34
AUG									
08...	4.9	2.8	.20	49	30	.050	.010	.41	.42

DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)
DEC									
05...	0.100	0.020	0.10	0.02	--	--	1	--	--
FEB									
28...	.150	.020	.15	.02	2500	120	<1	0.900	0.100
JUN									
06...	.100	.030	.10	.03	1600	190	<1	7.20	.600
AUG									
08...	.080	.060	.08	.06	2700	470	<1	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02444157 TOMBIGBEE RIVER AT STATE HIGHWAY 86 NEAR PICKENSVILLE, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
21...	1115	25.0	4600	32	397
21...	1125	50.0	4600	19	236
21...	1130	75.0	4600	22	273
DEC					
07...	1430	25.0	3500	28	265
07...	1435	50.0	3500	45	425
07...	1440	75.0	3500	40	378
JAN					
12...	1445	25.0	54500	361	53100
12...	1500	50.0	54500	275	40500
12...	1510	75.0	54500	416	61200
MAR					
01...	1130	25.0	64500	329	57300
01...	1140	50.0	64500	292	50900
01...	1145	75.0	64500	310	54000
APR					
12...	0950	25.0	7870	13	276
12...	0955	50.0	7870	16	340
12...	1000	75.0	7870	11	234
MAY					
23...	1000	25.0	9570	17	439
23...	1010	50.0	9570	27	698
23...	1015	75.0	9570	29	749
JUL					
05...	1030	25.0	26600	71	5100
05...	1035	50.0	26600	50	3590
05...	1045	75.0	26600	96	6890
AUG					
15...	1020	25.0	3700	8	80
15...	1025	50.0	3700	10	100
15...	1030	75.0	3700	6	60

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02444210 TOMBIGBEE RIVER IN BIG CREEK BENDWAY NEAR PICKENSVILLE, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	TRANSPARENCY (SECCHI DISK) (IN)
DEC										
06...	0930	--	70	60	6.70	--	6.5	30	9.0	24.5
06...	0931	5.0	72	--	6.50	--	6.5	--	--	--
06...	0932	6.0	72	--	6.50	--	6.5	--	--	--
FEB										
28...	1210	--	68	70	7.20	--	9.5	--	47	9.50
28...	1211	5.0	68	--	7.10	--	9.0	--	--	--
28...	1212	10.0	68	--	7.00	--	8.0	--	--	--
28...	1213	15.0	68	--	7.10	--	7.0	--	--	--
28...	1214	17.0	68	--	7.10	--	7.0	--	--	--
JUN										
06...	1500	--	67	55	7.50	--	26.5	30	18	12.0
06...	1501	5.0	47	--	7.00	--	23.0	--	--	--
06...	1502	10.0	38	--	6.30	--	21.5	--	--	--
AUG										
08...	1145	--	64	151	6.60	25.0	24.0	20	18	17.2
08...	1146	5.0	63	--	6.60	--	23.5	--	--	--

DATE	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	PH LAB (STANDARD UNITS)
DEC										
06...	766	13.2	107	4.7	150	19	4	4.8	1.6	7.20
06...	--	12.6	--	--	--	--	--	--	--	--
06...	--	12.4	--	--	--	--	--	--	--	--
FEB										
28...	757	12.6	110	7.9	390	26	7	8.9	.90	6.75
28...	--	12.5	--	--	--	--	--	--	--	--
28...	--	13.2	--	--	--	--	--	--	--	--
28...	--	14.0	--	--	--	--	--	--	--	--
28...	--	14.1	--	--	--	--	--	--	--	--
JUN										
06...	755	9.2	115	9.1	--	18	6	5.6	1.0	6.50
06...	--	7.3	--	--	--	--	--	--	--	--
06...	--	6.8	--	--	--	--	--	--	--	--
AUG										
08...	758	7.1	85	1.7	200	63	9	23	1.3	7.14
08...	--	6.6	--	--	--	--	--	--	--	--

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
DEC									
06...	4.7	3.5	0.10	51	5	0.110	0.030	--	<.20
FEB									
28...	6.6	1.8	.20	48	46	.120	.020	0.18	.20
JUN									
06...	3.9	2.4	.30	57	64	.150	.030	.38	.41
AUG									
08...	8.3	4.9	.10	90	25	<.020	.010	.32	.33

DATE	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
DEC									
06...	0.060	<.020	0.06	--	--	--	<1	--	--
FEB									
28...	.120	<.020	.12	--	2200	160	4	1.70	0.100
JUN									
06...	.160	.040	.16	0.04	2700	230	<1	15.0	.900
AUG									
08...	.100	.020	.10	.02	1000	170	<1	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02444500 TOMBIGBEE RIVER NEAR COCHRANE, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
21...	1250	25.0	2170	86	504
21...	1300	50.0	2170	20	117
21...	1305	75.0	2170	20	117
DEC					
08...	1425	25.0	4380	15	177
08...	1430	50.0	4380	15	177
08...	1440	75.0	4380	16	189
JAN					
12...	1615	25.0	55300	355	53000
12...	1620	50.0	55300	358	53500
12...	1630	75.0	55300	409	61100
MAR					
01...	1310	25.0	64500	325	56600
01...	1315	50.0	64500	359	62500
01...	1320	75.0	64500	437	76100
APR					
12...	1121	25.0	8930	11	265
12...	1130	50.0	8930	6	145
12...	1135	75.0	8930	11	265
MAY					
23...	1105	25.0	9990	19	512
23...	1110	50.0	9990	26	701
23...	1115	75.0	9990	32	863
JUL					
05...	1140	25.0	27200	78	5730
05...	1150	50.0	27200	72	5290
05...	1155	75.0	27200	64	4700
AUG					
15...	1130	25.0	3420	12	111
15...	1135	50.0	3420	14	129
15...	1140	75.0	3420	14	129

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02446500 SIPSEY RIVER NEAR ELROD, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAM-PLING DEPTH (FEET)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	TRANS-PAR-ENCY (SECCHI DISK) (IN)
OCT										
17...	1300	--	144	136	--	--	15.0	--	--	--
NOV										
25...	1430	--	994	65	--	--	12.5	--	--	--
DEC										
05...	0915	--	1270	70	69	6.20	7.5	30	4.1	39.8
05...	0916	5.0	--	70	--	6.20	7.5	--	--	--
05...	0917	8.0	--	70	--	6.20	7.5	--	--	--
JAN										
10...	0915	--	2260	54	--	--	10.0	--	--	--
FEB										
21...	1250	--	902	74	--	--	12.0	--	--	--
27...	0940	--	2890	52	52	7.30	8.5	40	11	30.0
27...	0941	5.0	--	52	--	6.70	8.0	--	--	--
27...	0942	10.0	--	52	--	6.40	8.0	--	--	--
27...	0943	12.0	--	52	--	6.40	8.0	--	--	--
APR										
17...	1240	--	919	74	--	--	19.0	--	--	--
MAY										
26...	0910	--	337	94	--	--	24.0	--	--	--
JUN										
05...	0915	--	215	85	83	6.40	23.5	40	10	30.3
05...	0916	4.0	--	84	--	6.40	23.5	--	--	--
JUL										
12...	0900	--	972	74	--	--	25.0	--	--	--
AUG										
07...	0945	--	255	90	93	8.40	26.5	40	11	31.5
07...	0946	3.0	--	91	--	7.80	26.5	--	--	--
28...	0930	--	103	115	--	--	27.0	--	--	--

DATE	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	PH LAB (STAND-ARD UNITS)
DEC										
05...	765	9.9	82	3.8	130	22	16	4.2	2.9	6.40
05...	--	9.6	--	--	--	--	--	--	--	--
05...	--	9.6	--	--	--	--	--	--	--	--
FEB										
27...	746	11.9	103	1.8	230	17	12	3.1	2.2	6.21
27...	--	12.0	--	--	--	--	--	--	--	--
27...	--	11.3	--	--	--	--	--	--	--	--
27...	--	10.9	--	--	--	--	--	--	--	--
JUN										
05...	753	6.5	77	.4	470	31	14	6.0	4.0	6.80
05...	--	6.4	--	--	--	--	--	--	--	--
AUG										
07...	754	6.0	76	5.0	47	37	17	7.3	4.5	6.84
07...	--	5.5	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02446500 SIPSEY RIVER NEAR ELROD, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)
DEC 05...	18	2.3	0.20	60	<1	0.050	0.010	0.22	0.23
FEB 27...	13	1.9	.10	42	6	.020	<.010	--	.27
JUN 05...	14	2.1	.20	65	18	.190	.050	.16	.21
AUG 07...	16	2.2	.10	62	10	.230	.050	.18	.23

DATE	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
DEC 05...	0.040	0.040	0.04	0.04	--	--	<1	--	--
FEB 27...	.030	<.020	.03	--	1000	37	5	0.700	0.100
JUN 05...	.050	.030	.05	.03	2000	500	<1	1.10	.200
AUG 07...	.040	<.020	.04	--	1700	600	<1	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02447008 TOMBIGBEE RIVER AT COOKS BEND ABOVE CUT NEAR WARSAW, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM
JAN							
13...	1300	25.0	62600	578	97700	--	--
13...	1305	50.0	62600	570	96300	--	--
13...	1310	75.0	62600	449	75900	--	--
13...	1455	25.0	72300	803	157000	--	--
13...	1500	50.0	72300	612	119000	--	--
13...	1505	75.0	72300	574	112000	--	--
15...	1300	25.0	89200	334	80400	--	--
15...	1305	50.0	89200	356	85700	--	--
15...	1310	75.0	89200	394	94900	--	--
17...	1330	25.0	107000	167	48200	--	--
17...	1340	50.0	107000	230	66400	--	--
17...	1350	75.0	107000	259	74800	--	--
19...	0930	75.0	74900	72	14600	--	--
19...	0932	50.0	74900	68	13800	--	--
19...	0935	25.0	74900	66	13300	--	--
19...	1256	75.0	66900	61	11000	--	--
19...	1257	50.0	66900	64	11600	--	--
19...	1258	25.0	66900	55	9930	--	--
20...	0945	25.0	--	--	--	0	0
20...	1000	50.0	--	--	--	0	1
20...	1015	75.0	--	--	--	0	0

DATE	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JAN							
20...	1	8	16	19	25	39	75
20...	5	13	15	20	29	57	98
20...	8	100	100	100	100	100	100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02447010 TOMBIGBEE RIVER IN COOK'S BENDWAY NEAR WARSAW, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMPLING DEPTH (FEET)	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)
DEC										
06...	1515	--	--	--	100	76	6.60	10.0	60	15
06...	1516	--	5.0	--	100	--	6.50	10.0	--	--
06...	1517	--	10.0	--	100	--	6.50	9.5	--	--
06...	1518	--	15.0	--	100	--	6.50	10.0	--	--
06...	1519	--	20.0	--	95	--	6.50	9.5	--	--
06...	1520	--	25.0	--	90	--	6.50	9.5	--	--
06...	1521	--	30.0	--	90	--	6.50	9.5	--	--
06...	1522	--	35.0	--	90	--	6.50	9.5	--	--
06...	1523	--	40.0	--	110	--	6.50	9.5	--	--
JAN										
13...	1325	25.0	--	36500	--	--	--	--	--	--
13...	1330	50.0	--	36500	--	--	--	--	--	--
13...	1335	75.0	--	36500	--	--	--	--	--	--
13...	1525	25.0	--	32900	--	--	--	--	--	--
13...	1530	50.0	--	32900	--	--	--	--	--	--
13...	1535	75.0	--	32900	--	--	--	--	--	--
15...	1250	25.0	--	36400	--	--	--	--	--	--
15...	1255	50.0	--	36400	--	--	--	--	--	--
15...	1300	75.0	--	36400	--	--	--	--	--	--
17...	1320	25.0	--	49500	--	--	--	--	--	--
17...	1325	50.0	--	49500	--	--	--	--	--	--
17...	1330	75.0	--	49500	--	--	--	--	--	--
19...	0922	75.0	--	34900	--	--	--	--	--	--
19...	0926	50.0	--	34900	--	--	--	--	--	--
19...	0927	25.0	--	34900	--	--	--	--	--	--
19...	1251	75.0	--	29100	--	--	--	--	--	--
19...	1253	50.0	--	29100	--	--	--	--	--	--
19...	1254	25.0	--	29100	--	--	--	--	--	--
20...	0900	25.0	--	--	--	--	--	--	--	--
20...	0910	50.0	--	--	--	--	--	--	--	--
20...	0920	75.0	--	--	--	--	--	--	--	--
MAR										
01...	0920	--	--	--	93	99	7.70	7.5	--	190
01...	0921	--	5.0	--	93	--	7.70	7.5	--	--
01...	0922	--	10.0	--	93	--	7.70	7.5	--	--
01...	0923	--	15.0	--	92	--	7.70	7.5	--	--
01...	0924	--	20.0	--	93	--	7.70	7.5	--	--
01...	0925	--	25.0	--	92	--	7.70	7.5	--	--
01...	0926	--	30.0	--	91	--	7.70	7.5	--	--
01...	0927	--	35.0	--	91	--	7.70	7.5	--	--
01...	0928	--	40.0	--	90	--	7.70	7.5	--	--
01...	0929	--	45.0	--	90	--	7.70	7.5	--	--
01...	0930	--	50.0	--	89	--	7.70	7.5	--	--
01...	0931	--	55.0	--	88	--	7.70	7.5	--	--
01...	0932	--	60.0	--	88	--	7.70	7.5	--	--
JUN										
07...	0930	--	--	--	134	137	7.00	26.0	30	21
07...	0931	--	5.0	--	135	--	7.00	26.0	--	--
07...	0932	--	5.0	--	133	--	6.90	26.0	--	--
07...	0933	--	5.0	--	133	--	6.90	26.0	--	--
07...	0934	--	5.0	--	131	--	6.90	26.0	--	--
07...	0935	--	5.0	--	130	--	6.90	26.0	--	--
07...	0936	--	5.0	--	128	--	6.90	26.0	--	--
07...	0937	--	5.0	--	128	--	6.90	26.0	--	--
07...	0938	--	5.0	--	128	--	6.90	26.0	--	--
07...	0939	--	5.0	--	125	--	6.90	26.0	--	--
AUG										
09...	1000	--	--	--	112	116	7.20	28.5	30	19
09...	1001	--	5.0	--	113	--	7.00	28.5	--	--
09...	1002	--	10.0	--	113	--	7.00	28.5	--	--
09...	1003	--	15.0	--	113	--	7.00	28.5	--	--
09...	1004	--	20.0	--	112	--	6.90	28.5	--	--
09...	1005	--	25.0	--	111	--	6.90	28.5	--	--
09...	1006	--	30.0	--	110	--	6.90	28.5	--	--
09...	1007	--	35.0	--	109	--	6.90	28.5	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02447010 TOMBIGBEE RIVER IN COOK'S BENDWAY NEAR WARSAW, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TRANS-PAR-ENCY (SECCHI DISK) (IN)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC										
06...	14.0	763	12.0	106	6.7	47	27	9	8.0	1.7
06...	--	--	12.0	--	--	--	--	--	--	--
06...	--	--	12.0	--	--	--	--	--	--	--
06...	--	--	12.0	--	--	--	--	--	--	--
06...	--	--	12.0	--	--	--	--	--	--	--
06...	--	--	12.0	--	--	--	--	--	--	--
06...	--	--	12.0	--	--	--	--	--	--	--
06...	--	--	11.9	--	--	--	--	--	--	--
06...	--	--	11.8	--	--	--	--	--	--	--
JAN										
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
MAR										
01...	6.50	763	13.1	109	4.8	2800	41	8	15	0.90
01...	--	--	12.8	--	--	--	--	--	--	--
01...	--	--	12.6	--	--	--	--	--	--	--
01...	--	--	12.5	--	--	--	--	--	--	--
01...	--	--	12.4	--	--	--	--	--	--	--
01...	--	--	12.3	--	--	--	--	--	--	--
01...	--	--	12.1	--	--	--	--	--	--	--
01...	--	--	12.0	--	--	--	--	--	--	--
01...	--	--	12.3	--	--	--	--	--	--	--
01...	--	--	12.2	--	--	--	--	--	--	--
01...	--	--	12.1	--	--	--	--	--	--	--
01...	--	--	12.1	--	--	--	--	--	--	--
01...	--	--	12.1	--	--	--	--	--	--	--
JUN										
07...	10.3	755	9.3	116	6.9	K82	48	0	17	1.4
07...	--	--	8.6	--	--	--	--	--	--	--
07...	--	--	8.1	--	--	--	--	--	--	--
07...	--	--	8.1	--	--	--	--	--	--	--
07...	--	--	8.1	--	--	--	--	--	--	--
07...	--	--	8.0	--	--	--	--	--	--	--
07...	--	--	7.9	--	--	--	--	--	--	--
07...	--	--	7.9	--	--	--	--	--	--	--
07...	--	--	7.7	--	--	--	--	--	--	--
07...	--	--	7.7	--	--	--	--	--	--	--
AUG										
09...	17.7	760	6.0	78	6.0	K6	51	15	18	1.5
09...	--	--	5.7	--	--	--	--	--	--	--
09...	--	--	5.5	--	--	--	--	--	--	--
09...	--	--	5.4	--	--	--	--	--	--	--
09...	--	--	5.5	--	--	--	--	--	--	--
09...	--	--	5.4	--	--	--	--	--	--	--
09...	--	--	5.2	--	--	--	--	--	--	--
09...	--	--	5.1	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02447010 TOMBIGBEE RIVER IN COOK'S BENDWAY NEAR WARSAW, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	PH LAB (STAND-ARD UNITS)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)
DEC										
06...	6.90	15	5.0	0.20	69	20	0.090	0.030	0.34	0.37
JAN										
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
MAR										
01...	7.32	6.8	2.5	.30	70	372	.190	.040	.46	.50
JUN										
07...	7.20	8.5	11	.20	102	70	.160	.050	.32	.37
AUG										
09...	7.10	6.7	6.0	.30	74	15	.090	.060	.28	.34

DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)
DEC										
06...	0.070	0.020	0.07	0.02	--	--	<1	--	--	--
JAN										
13...	--	--	--	--	--	--	--	--	--	625
13...	--	--	--	--	--	--	--	--	--	670
13...	--	--	--	--	--	--	--	--	--	846
13...	--	--	--	--	--	--	--	--	--	547
13...	--	--	--	--	--	--	--	--	--	700
13...	--	--	--	--	--	--	--	--	--	802
15...	--	--	--	--	--	--	--	--	--	299
15...	--	--	--	--	--	--	--	--	--	436
15...	--	--	--	--	--	--	--	--	--	523
17...	--	--	--	--	--	--	--	--	--	222
17...	--	--	--	--	--	--	--	--	--	231
17...	--	--	--	--	--	--	--	--	--	253
19...	--	--	--	--	--	--	--	--	--	118
19...	--	--	--	--	--	--	--	--	--	91
19...	--	--	--	--	--	--	--	--	--	68
19...	--	--	--	--	--	--	--	--	--	77
19...	--	--	--	--	--	--	--	--	--	156
19...	--	--	--	--	--	--	--	--	--	57
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
MAR										
01...	.330	.030	.33	.03	7100	270	--	.800	.100	--
JUN										
07...	.120	.030	.12	.03	2900	260	<1	5.30	.400	--
AUG										
09...	.060	.020	.06	.02	1100	110	<1	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02447010 TOMBIGBEE RIVER IN COOK'S BENDWAY NEAR WARSAW, AL--Continued

WATER-QUALITY DATAS, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JAN										
13...	61600	--	--	--	--	--	--	--	--	--
13...	66000	--	--	--	--	--	--	--	--	--
13...	83400	--	--	--	--	--	--	--	--	--
13...	48600	--	--	--	--	--	--	--	--	--
13...	62200	--	--	--	--	--	--	--	--	--
13...	71200	--	--	--	--	--	--	--	--	--
15...	29400	--	--	--	--	--	--	--	--	--
15...	42900	--	--	--	--	--	--	--	--	--
15...	51400	--	--	--	--	--	--	--	--	--
17...	29700	--	--	--	--	--	--	--	--	--
17...	30900	--	--	--	--	--	--	--	--	--
17...	33800	--	--	--	--	--	--	--	--	--
19...	11100	--	--	--	--	--	--	--	--	--
19...	8570	--	--	--	--	--	--	--	--	--
19...	6410	--	--	--	--	--	--	--	--	--
19...	6050	--	--	--	--	--	--	--	--	--
19...	12300	--	--	--	--	--	--	--	--	--
19...	4480	--	--	--	--	--	--	--	--	--
20...	--	0	0	34	100	100	100	100	100	100
20...	--	0	2	50	95	95	96	96	97	100
20...	--	4	8	23	12	14	16	20	23	30

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02448500 NOXUBEE RIVER NEAR GEIGER, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLING DEPTH (FEET)	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	TRANSPARENCY (SECCHI DISK) (IN)
OCT										
20...	1120	--	78	134	--	--	16.0	--	--	--
NOV										
30...	1230	--	1420	160	--	--	11.0	--	--	--
DEC										
06...	1315	--	354	180	164	7.40	7.0	45	12	20.5
06...	1316	5.0	--	180	--	--	7.0	--	--	--
JAN										
14...	1530	--	7510	102	--	--	10.5	--	--	--
FEB										
24...	1150	--	5670	104	--	--	8.0	--	--	--
28...	1500	--	5940	125	141	7.90	8.0	--	140	10.0
28...	1501	5.0	--	126	--	7.90	8.0	--	--	--
28...	1502	10.0	--	126	--	7.90	8.0	--	--	--
28...	1503	15.0	--	126	--	7.90	8.0	--	--	--
28...	1504	18.0	--	126	--	8.00	8.0	--	--	--
MAY										
23...	1300	--	3070	130	--	--	22.0	--	--	--
JUN										
06...	1745	--	2270	130	140	7.50	23.5	70	99	9.00
06...	1746	5.0	--	130	--	7.50	23.5	--	--	--
JUL										
05...	1340	--	7530	97	--	--	24.0	--	--	--
AUG										
08...	1445	--	536	114	117	7.30	27.0	70	38	15.7
08...	1446	5.0	--	113	--	7.40	27.0	--	--	--
15...	1400	--	189	150	--	--	26.5	--	--	--

DATE	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	PH LAB (STANDARD UNITS)
DEC										
06...	764	13.2	108	4.1	47	64	12	22	2.3	7.60
06...	--	13.6	--	--	--	--	--	--	--	--
FEB										
28...	758	13.6	115	1.8	K6000	56	10	20	1.5	7.30
28...	--	11.9	--	--	--	--	--	--	--	--
28...	--	11.4	--	--	--	--	--	--	--	--
28...	--	10.9	--	--	--	--	--	--	--	--
28...	--	10.9	--	--	--	--	--	--	--	--
JUN										
06...	755	7.6	90	5.0	--	56	11	20	1.5	7.00
06...	--	6.9	--	--	--	--	--	--	--	--
AUG										
08...	756	6.8	86	.9	K110	47	10	16	1.8	7.18
08...	--	6.0	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02448500 NOXUBEE RIVER NEAR GEIGER, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)
DEC									
06...	15	5.0	0.20	113	16	0.200	0.010	0.38	0.39
FEB									
28...	12	3.4	.50	98	196	.170	.030	.43	.46
JUN									
06...	9.1	4.1	.30	117	44	.530	.010	.40	.41
AUG									
08...	9.5	3.6	.20	81	45	.180	.020	.26	.28

DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)
DEC									
06...	0.120	0.040	0.12	0.04	--	--	<1	--	--
FEB									
28...	.290	.040	.29	.04	4700	220	<1	1.70	0.100
JUN									
06...	.250	.060	.25	.06	6100	340	<1	1.00	.100
AUG									
08...	.110	.050	.11	.05	2000	120	<1	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02464035 CRIPPLE CREEK EAST OF SAMANTHA, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT											
03...	1310	18	205	202	5.80	--	21.0	752	8.3	94	120
31...	1230	3.6	710	--	7.30	--	14.0	753	9.0	89	--
NOV											
29...	1130	43	125	--	7.10	--	10.0	760	11.2	99	--
JAN											
04...	1020	35	155	158	6.60	6.0	10.0	760	10.8	96	29
31...	1100	19	460	--	6.80	--	9.0	755	10.8	94	--
MAR											
01...	1345	122	102	--	6.90	--	10.0	756	10.8	96	--
31...	1400	72	136	139	6.70	--	15.0	752	9.7	97	280
MAY											
02...	0900	7.2	605	--	6.80	--	17.0	754	8.5	89	--
30...	1300	2.6	850	--	7.10	--	22.5	758	8.0	93	--
JUL											
06...	0930	73	245	249	6.50	28.0	21.0	754	8.4	95	130
AUG											
01...	1200	9.3	790	--	7.30	--	25.0	754	8.8	108	--
SEP											
05...	1215	1.2	1440	--	7.40	--	24.5	754	8.0	97	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3
OCT											
03...	150	79	63	15	10	3.3	8	0.2	1.7	7.20	16
JAN											
04...	85	60	60	11	7.8	2.4	8	.1	1.1	7.10	--
MAR											
31...	58	53	53	9.2	7.2	2.4	9	.1	1.0	6.58	--
JUL											
06...	390	100	100	18	14	2.6	5	.1	1.3	6.61	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT											
03...	69	2.0	0.20	9.6	150	121	0.20	7.29	0.160	0.010	0.170
JAN											
04...	58	1.9	.10	9.0	100	92	.14	9.45	--	<.010	.100
MAR											
31...	46	1.1	<.10	8.6	86	76	.12	16.7	--	<.010	.070
JUL											
06...	95	1.5	.10	9.6	163	143	.22	32.1	--	<.010	.120

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT										
03...	0.33	0.50	0.030	0.020	0.01	20	520	90	490	490
JAN										
04...	<.20	--	<.020	.010	--	<20	370	110	380	350
MAR										
31...	<.20	--	<.020	.010	--	<20	460	60	350	340
JUL										
06...	.39	.51	.040	.010	.03	<20	510	50	740	710

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02464149 TURKEY CREEK NEAR PATTERSON CHAPEL, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT											
04...	0915	3.7	195	195	7.10	--	16.0	758	9.5	97	840
NOV											
01...	1010	2.8	192	--	6.80	--	14.0	756	9.8	96	--
30...	1350	11	235	--	6.70	--	11.0	759	10.8	98	--
JAN											
05...	0810	13	150	150	6.40	4.0	7.0	759	11.8	98	61
FEB											
01...	0945	11	132	--	6.70	--	11.5	754	10.8	100	--
MAR											
03...	1000	25	102	--	6.70	--	11.0	761	10.6	96	--
APR											
04...	0830	30	105	111	6.90	--	16.0	751	9.0	93	250
MAY											
01...	0920	8.4	172	--	6.90	--	18.5	752	8.4	91	--
JUN											
02...	1000	2.8	240	--	7.30	--	22.0	758	8.0	92	--
JUL											
03...	1100	116	76	78	6.60	25.0	20.0	747	9.3	104	240
AUG											
02...	0945	5.1	205	--	7.10	--	25.0	758	8.3	101	--
SEP											
06...	0945	2.2	240	--	6.80	--	24.0	756	7.9	95	--

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	PH LAB (STANDARD UNITS)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3
OCT											
04...	450	80	55	16	9.7	2.5	6	0.1	1.8	7.30	25
JAN											
05...	64	60	60	12	7.2	2.0	7	.1	1.2	7.20	--
APR											
04...	290	44	44	8.8	5.4	1.8	8	.1	1.1	7.14	--
JUL											
03...	900	29	29	5.6	3.7	1.3	8	.1	1.1	6.37	--

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT											
04...	59	2.0	0.20	8.6	140	115	0.19	1.40	--	<.010	0.310
JAN											
05...	46	1.8	.10	8.1	93	79	.13	3.26	--	<.010	.190
APR											
04...	30	1.2	<.10	7.1	67	56	.09	5.43	0.180	.010	.190
JUL											
03...	23	1.0	.20	7.3	46	44	.06	14.4	.150	.010	.160

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT										
04...	<.20	--	0.020	<.010	0.02	<20	370	80	100	90
JAN										
05...	<.20	--	<.020	.010	--	<20	320	70	250	250
APR										
04...	<.20	--	<.020	.032	--	<20	1200	80	270	230
JUL										
03...	.39	0.55	.030	.030	0	<20	2400	50	430	320

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02464155 LAKE TUSCALOOSA AT HILLTOP ESTATES LANDING (SITE A) NR NORTHPORT, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	OXYGEN, DIS-SOLVED (MG/L)
MAY								
19...	1220	75.0	--	93	6.90	24.0	50.5	10.1
19...	1221	75.0	5.0	98	7.00	22.5	--	9.9
19...	1222	75.0	10.0	99	7.00	21.0	--	8.6
19...	1223	75.0	15.0	114	6.90	18.5	--	7.3
19...	1224	75.0	20.0	117	6.80	18.0	--	6.6
19...	1225	75.0	25.0	113	6.70	17.0	--	5.9
19...	1226	75.0	30.0	86	6.60	15.0	--	4.0
19...	1227	75.0	35.0	78	6.60	13.0	--	3.4
19...	1228	75.0	40.0	73	6.50	12.5	--	3.3
19...	1229	75.0	41.0	76	6.40	12.5	--	3.4
19...	1243	50.0	--	91	6.70	24.0	--	9.9
19...	1244	50.0	5.0	91	7.00	22.5	--	9.5
19...	1245	50.0	10.0	92	7.00	21.5	--	9.3
19...	1246	50.0	15.0	114	7.00	18.5	--	8.1
19...	1247	50.0	20.0	114	6.80	18.0	--	6.6
19...	1248	50.0	22.0	112	6.60	17.5	--	6.3
19...	1252	25.0	--	91	6.90	23.5	--	9.5
19...	1253	25.0	5.0	90	7.10	22.0	--	8.7
19...	1254	25.0	10.0	90	7.10	21.0	--	8.9
19...	1255	25.0	13.0	111	6.90	19.0	--	7.1
JUL								
31...	1249	75.0	--	67	6.90	32.5	46.5	7.5
31...	1250	75.0	5.0	67	7.00	31.5	--	7.9
31...	1251	75.0	10.0	105	6.50	26.5	--	4.1
31...	1252	75.0	12.0	102	6.30	25.0	--	3.0
31...	1253	75.0	15.0	97	6.10	24.0	--	0.9
31...	1254	75.0	17.0	88	6.10	23.0	--	0.4
31...	1255	75.0	20.0	68	6.10	21.5	--	0.2
31...	1256	75.0	22.0	68	6.10	21.0	--	0.1
31...	1257	75.0	25.0	64	6.10	20.0	--	0.1
31...	1258	75.0	30.0	68	6.10	17.5	--	0.1
31...	1259	75.0	35.0	73	6.20	16.0	--	0.1
31...	1300	75.0	40.0	79	6.20	13.5	--	0.1
31...	1301	75.0	42.0	81	6.40	13.5	--	0.1
31...	1302	50.0	--	67	6.90	32.5	--	7.7
31...	1303	50.0	5.0	67	6.90	30.5	--	7.6
31...	1304	50.0	10.0	105	6.70	26.5	--	5.0
31...	1305	50.0	12.0	104	6.30	25.0	--	3.1
31...	1306	50.0	15.0	97	6.20	23.5	--	1.0
31...	1307	50.0	16.0	96	6.20	2[illegible].5	--	0.5
31...	1310	25.0	--	66	6.90	33.0	--	7.9
31...	1311	25.0	5.0	67	7.00	31.0	--	7.7
31...	1312	25.0	10.0	105	6.60	26.0	--	4.4
31...	1313	25.0	12.0	103	6.20	25.5	--	3.0
31...	1314	25.0	15.0	97	6.10	23.5	--	0.8

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02464400 LAKE TUSCALOOSA AT TIERCE PATTON ROAD NEAR NORTHPORT, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SPECIFIC CONDUCTANCE	SPECIFIC CONDUCTANCE LAB	PH (STANDARD	TEMPERATURE AIR	TEMPERATURE WATER	BAROMETRIC PRESSURE (MM OF	OXYGEN, DISSOLVED	OXYGEN, DISSOLVED (PERCENT SATUR-	COLIFORM, FECAL, 0.7 UM-MF (COLS./	STREPTOCOCCI FECAL, KF AGAR (COLS. PER
OCT											
05...	1130	112	107	6.30	--	24.0	763	6.4	76	--	3
NOV											
02...	1115	98	--	7.20	--	19.0	755	8.0	87	--	--
29...	1210	102	--	6.80	--	16.0	760	8.7	88	--	--
JAN											
04...	1450	95	96	6.70	10.0	14.0	760	10.0	97	72	230
FEB											
02...	1315	70	--	6.60	--	13.5	761	10.0	96	--	--
28...	1330	75	--	6.80	--	9.0	755	10.4	91	--	--
APR											
05...	0930	71	72	6.70	--	16.5	759	8.5	87	21	57
MAY											
02...	1400	66	--	6.50	--	24.0	757	8.3	99	--	--
30...	1400	70	--	7.10	--	28.5	758	7.7	100	--	--
JUL											
06...	0815	57	--	6.20	--	26.0	755	7.5	93	K29	29
AUG											
01...	1445	56	--	6.70	--	33.0	753	7.0	99	--	--
SEP											
07...	1000	72	--	6.50	--	27.5	756	7.1	91	--	--

DATE	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	PH LAB (STANDARD UNITS)	SULFATE DISSOLVED (MG/L AS SO4)
OCT										
05...	30	30	5.4	4.1	6.0	29	0.5	1.4	6.90	23
JAN										
04...	27	27	5.0	3.6	4.9	27	.4	1.3	6.70	16
APR										
05...	23	23	4.2	3.0	2.9	21	.3	1.0	6.52	19

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
05...	5.2	0.30	7.1	9	55	0.01	0	0.010	0.010	0.020
JAN										
04...	4.4	.10	7.5	60	43	.08	0	--	<.010	.080
APR										
05...	2.0	<.10	7.3	46	40	.06	0	--	<.010	.100

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT										
05...	0.39	0.41	0.020	0.010	0.01	<20	2100	1500	1400	1400
JAN										
04...	.25	.33	.020	.010	.01	<20	520	190	110	90
APR										
05...	<.20	--	<.020	.010	--	<20	650	130	120	100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02464500 LAKE TUSCALOOSA AT STATE HIGHWAY 69 NEAR TUSCALOOSA, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (IN)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
OCT											
04...	1415	--	--	103	101	6.30	25.0	--	757	6.0	73
NOV											
01...	1430	--	--	97	--	6.60	19.0	--	753	7.8	85
29...	1345	--	--	101	--	6.80	16.0	--	759	8.5	86
JAN											
05...	1315	--	--	98	99	6.70	12.0	--	755	10.2	96
FEB											
01...	1430	--	--	57	--	6.80	14.0	--	752	9.9	97
MAR											
01...	1515	--	--	68	--	6.50	10.0	--	758	10.3	92
APR											
04...	1115	--	--	68	66	6.60	17.0	--	750	8.9	94
MAY											
01...	1400	--	--	62	--	6.40	24.5	--	752	8.2	100
19...	1309	25.0	--	69	--	6.80	23.5	92.0	--	7.0	--
19...	1310	25.0	5.0	68	--	6.80	23.0	--	--	6.8	--
19...	1311	25.0	10.0	68	--	6.80	22.5	--	--	5.8	--
19...	1312	25.0	15.0	73	--	6.80	20.5	--	--	6.6	--
19...	1313	25.0	20.0	76	--	6.70	18.0	--	--	6.3	--
19...	1314	25.0	25.0	73	--	6.50	15.0	--	--	5.8	--
19...	1315	25.0	30.0	70	--	6.50	13.0	--	--	5.9	--
19...	1316	25.0	35.0	71	--	6.40	11.5	--	--	5.8	--
19...	1317	25.0	40.0	66	--	6.40	11.0	--	--	5.7	--
19...	1318	25.0	45.0	65	--	6.30	10.5	--	--	5.9	--
19...	1319	25.0	50.0	65	--	6.40	10.5	--	--	6.1	--
19...	1320	25.0	55.0	65	--	6.40	10.0	--	--	6.1	--
19...	1321	25.0	60.0	64	--	6.30	10.0	--	--	6.2	--
19...	1322	50.0	--	67	--	6.70	22.5	--	--	7.0	--
19...	1323	50.0	5.0	67	--	6.70	22.5	--	--	7.0	--
19...	1324	50.0	10.0	66	--	6.70	22.5	--	--	6.8	--
19...	1325	50.0	15.0	71	--	6.70	20.0	--	--	7.8	--
19...	1326	50.0	20.0	77	--	6.60	17.0	--	--	5.8	--
19...	1327	50.0	25.0	74	--	6.50	15.0	--	--	5.4	--
19...	1328	50.0	30.0	68	--	6.50	13.0	--	--	5.7	--
19...	1329	50.0	35.0	67	--	6.40	11.5	--	--	5.8	--
19...	1330	50.0	40.0	66	--	6.40	11.0	--	--	5.7	--
19...	1331	50.0	43.0	66	--	6.40	10.5	--	--	5.8	--
19...	1337	75.0	--	68	--	6.70	22.5	--	--	6.8	--
19...	1338	75.0	5.0	68	--	6.70	23.0	--	--	6.6	--
19...	1339	75.0	10.0	67	--	6.70	22.0	--	--	6.7	--
19...	1340	75.0	15.0	71	--	6.70	21.0	--	--	6.0	--
19...	1341	75.0	20.0	77	--	6.50	18.0	--	--	5.5	--
19...	1342	75.0	25.0	70	--	6.50	14.5	--	--	5.3	--
19...	1343	75.0	30.0	68	--	6.40	13.5	--	--	5.6	--
31...	1400	--	--	64	--	7.10	29.5	--	759	7.8	103

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	PH LAB (STANDARD UNITS)
OCT											
04...	7	1	28	13	4.7	3.9	5.8	30	0.5	1.3	7.40
JAN											
05...	11	0	27	27	4.8	3.7	5.4	29	.5	1.3	6.90
FEB											
01...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	K2	K1	22	22	4.0	2.8	2.5	19	.2	1.0	6.64

DATE	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)
OCT											
04...	15	23	5.1	0.20	6.8	84	61	0.11	0	0.010	0.010
JAN											
05...	--	17	4.7	.10	7.2	57	44	.08	0	--	<.010
FEB											
01...	3	--	--	--	--	--	--	--	--	--	--
APR											
04...	--	17	1.8	<.10	6.8	45	36	.06	0	--	<.010

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02464500 LAKE TUSCALOOSA AT STATE HIGHWAY 69 NEAR TUSCALOOSA, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT											
04...	0.020	0.29	0.31	0.020	0.010	0.01	<20	440	100	1200	1200
JAN											
05...	.060	.38	.44	<.020	.010	--	<20	340	110	130	100
APR											
04...	.110	<.20	--	.020	.010	.01	<20	380	340	110	90

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
JUL												
07...	0845	--	--	60	6.00	27.5	--	757	8.0	102	K6	K3
31...	1139	25.0	--	55	6.80	32.0	67.0	--	7.4	--	--	--
31...	1140	25.0	5.0	54	6.80	31.5	--	--	7.5	--	--	--
31...	1141	25.0	10.0	57	6.50	26.5	--	--	4.9	--	--	--
31...	1142	25.0	12.0	60	6.20	25.0	--	--	3.8	--	--	--
31...	1143	25.0	15.0	59	6.10	23.5	--	--	2.4	--	--	--
31...	1144	25.0	17.0	56	5.90	22.5	--	--	1.7	--	--	--
31...	1145	25.0	20.0	50	5.90	21.5	--	--	1.6	--	--	--
31...	1146	25.0	22.0	51	5.80	20.5	--	--	1.4	--	--	--
31...	1147	25.0	25.0	53	5.80	20.0	--	--	1.2	--	--	--
31...	1148	25.0	30.0	57	5.90	17.0	--	--	1.5	--	--	--
31...	1149	25.0	35.0	59	5.90	14.0	--	--	2.0	--	--	--
31...	1150	25.0	40.0	60	5.90	12.5	--	--	1.9	--	--	--
31...	1151	25.0	45.0	62	5.90	12.0	--	--	1.6	--	--	--
31...	1152	25.0	50.0	60	5.90	11.5	--	--	1.8	--	--	--
31...	1153	25.0	55.0	59	6.00	11.0	--	--	2.0	--	--	--
31...	1154	25.0	60.0	59	6.00	10.5	--	--	2.2	--	--	--
31...	1155	25.0	65.0	59	6.00	10.5	--	--	2.3	--	--	--
31...	1156	50.0	--	53	6.60	32.0	--	--	7.6	--	--	--
31...	1157	50.0	5.0	52	6.80	31.0	--	--	7.4	--	--	--
31...	1158	50.0	10.0	58	6.40	26.5	--	--	4.9	--	--	--
31...	1159	50.0	12.0	59	6.10	24.5	--	--	3.1	--	--	--
31...	1200	50.0	15.0	57	5.90	23.0	--	--	2.3	--	--	--
31...	1201	50.0	17.0	55	5.90	22.5	--	--	1.7	--	--	--
31...	1202	50.0	20.0	49	5.80	21.5	--	--	1.7	--	--	--
31...	1203	50.0	22.0	50	5.80	21.0	--	--	1.5	--	--	--
31...	1204	50.0	25.0	53	5.80	19.0	--	--	1.3	--	--	--
31...	1205	50.0	30.0	57	5.90	17.0	--	--	1.4	--	--	--
31...	1206	50.0	35.0	58	5.90	14.5	--	--	1.9	--	--	--
31...	1207	50.0	40.0	60	5.90	12.5	--	--	1.7	--	--	--
31...	1208	50.0	44.0	61	5.90	12.0	--	--	1.5	--	--	--
31...	1209	75.0	--	53	6.80	32.0	--	--	7.2	--	--	--
31...	1210	75.0	5.0	52	6.80	31.5	--	--	7.5	--	--	--
31...	1211	75.0	10.0	51	6.50	26.5	--	--	6.6	--	--	--
31...	1212	75.0	12.0	58	6.20	25.0	--	--	3.6	--	--	--
31...	1213	75.0	15.0	56	6.00	23.0	--	--	2.4	--	--	--
31...	1214	75.0	17.0	54	5.90	22.5	--	--	1.8	--	--	--
31...	1215	75.0	20.0	49	5.80	21.5	--	--	1.7	--	--	--
31...	1216	75.0	22.0	49	5.80	20.5	--	--	1.5	--	--	--
31...	1217	75.0	25.0	52	5.80	19.5	--	--	1.3	--	--	--
31...	1218	75.0	28.0	56	5.80	18.0	--	--	1.3	--	--	--
AUG												
02...	1545	--	--	60	6.90	31.5	--	755	7.8	107	--	--
SEP												
07...	1200	--	--	60	6.60	28.5	--	755	7.4	96	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02464660 CARROLL CREEK AT STATE HIGHWAY 69 NEAR NORTHPORT, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 05...	1340	4.5	32	32	6.30	--	17.0	761	9.0	93	--
NOV 02...	1400	3.8	33	--	6.30	--	14.0	753	9.0	88	--
DEC 01...	1320	9.8	35	--	6.70	--	9.0	761	10.4	90	--
JAN 06...	1200	17	32	31	6.40	--	11.0	751	10.4	96	37
FEB 02...	1400	13	31	--	6.30	--	15.5	761	10.2	102	--
MAR 06...	1020	113	25	--	6.40	--	11.0	753	8.9	82	--
APR 03...	1430	20	28	26	6.20	--	16.5	756	9.0	93	120
MAY 02...	1445	4.1	36	--	6.80	--	18.5	756	8.6	93	--
JUN 01...	1330	2.4	36	--	6.80	--	23.0	760	7.6	89	--
JUL 05...	1500	148	24	24	5.80	31.0	24.0	752	6.7	81	>400
AUG 01...	1430	4.0	36	--	6.80	--	26.0	754	7.8	97	--
SEP 07...	1300	1.9	30	--	6.70	--	23.0	755	8.4	99	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	PH LAB (STAND-ARD UNITS)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 05...	270	8	8	1.6	0.90	1.5	25	0.2	1.7	6.00	3.1
JAN 06...	20	7	7	1.6	.80	1.4	26	.2	1.1	6.00	3.9
APR 03...	88	7	7	1.6	.70	1.7	31	.3	1.0	6.03	1.0
JUL 05...	2600	6	6	1.6	.60	.90	20	.2	1.1	5.67	1.4

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 05...	2.6	0.20	9.7	60	23	0.08	0.72	0.100	0.010	0.110
JAN 06...	2.8	.10	7.8	25	20	.03	1.12	--	<.010	.110
APR 03...	4.7	<.10	6.0	25	17	.03	1.35	.090	.010	.100
JUL 05...	1.3	.20	9.4	20	17	.03	7.99	.070	.010	.080

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 05...	0.73	0.84	0.060	0.030	0.03	40	3500	1100	250	220
JAN 06...	.50	.61	.020	.020	0	<20	1400	100	190	170
APR 03...	.33	.43	.020	.020	0	<20	1900	520	270	230
JUL 05...	.61	.69	.070	.050	.02	30	2200	560	310	190

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02464670 LAKE TUSCALOOSA AT SITE C NEAR TUSCALOOSA, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	OXYGEN, DIS-SOLVED (MG/L)
MAY								
19...	1045	25.0	--	68	6.70	22.5	127	9.3
19...	1046	25.0	5.0	68	6.80	22.0	--	9.2
19...	1047	25.0	10.0	68	6.70	21.5	--	9.2
19...	1048	25.0	15.0	65	6.60	20.0	--	10.4
19...	1049	25.0	20.0	68	6.60	16.0	--	8.9
19...	1050	25.0	25.0	67	6.50	14.0	--	8.7
19...	1051	25.0	30.0	68	6.50	12.5	--	8.6
19...	1052	25.0	35.0	66	6.50	11.0	--	8.7
19...	1053	25.0	40.0	66	6.40	10.5	--	8.7
19...	1054	25.0	45.0	66	6.40	10.5	--	8.9
19...	1055	25.0	50.0	66	6.40	10.0	--	9.0
19...	1056	25.0	55.0	67	6.40	10.0	--	9.1
19...	1057	25.0	60.0	66	6.40	10.0	--	9.1
19...	1058	25.0	65.0	65	6.40	10.0	--	9.4
19...	1059	25.0	70.0	66	6.40	10.0	--	9.1
19...	1100	25.0	75.0	65	6.30	10.0	--	9.1
19...	1101	25.0	80.0	65	6.30	10.0	--	9.0
19...	1102	50.0	--	66	6.50	22.5	--	9.0
19...	1103	50.0	5.0	66	6.60	22.5	--	9.0
19...	1104	50.0	10.0	65	6.60	22.0	--	8.9
19...	1105	50.0	15.0	65	6.60	19.0	--	10.2
19...	1106	50.0	20.0	68	6.60	16.5	--	8.4
19...	1107	50.0	25.0	67	6.50	13.5	--	8.6
19...	1108	50.0	30.0	66	6.50	13.0	--	8.5
19...	1109	50.0	35.0	66	6.50	11.5	--	8.5
19...	1110	50.0	40.0	65	6.40	10.5	--	8.9
19...	1111	50.0	45.0	65	6.40	10.5	--	8.9
19...	1112	50.0	50.0	66	6.40	10.0	--	9.1
19...	1113	50.0	55.0	66	6.40	10.0	--	9.2
19...	1114	50.0	60.0	66	6.40	10.0	--	9.0
19...	1115	50.0	65.0	66	6.30	10.0	--	9.1
19...	1116	75.0	--	67	6.60	22.5	--	8.9
19...	1117	75.0	5.0	67	6.60	22.5	--	9.0
19...	1118	75.0	10.0	66	6.60	21.5	--	9.1
19...	1119	75.0	15.0	65	6.60	18.5	--	8.2
19...	1120	75.0	20.0	66	6.60	16.5	--	8.7
19...	1121	75.0	25.0	65	6.50	14.5	--	8.6
19...	1122	75.0	30.0	66	6.50	13.0	--	8.5
19...	1123	75.0	35.0	66	6.50	11.5	--	8.5
19...	1124	75.0	40.0	65	6.40	10.5	--	8.8
19...	1125	75.0	45.0	65	6.40	10.0	--	8.9
19...	1126	75.0	50.0	66	6.40	10.0	--	9.2
19...	1127	75.0	55.0	66	6.40	10.0	--	9.0
19...	1128	75.0	60.0	66	6.30	10.0	--	8.8

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

C2464670 LAKE TUSCALOOSA AT SITE C NEAR TUSCALOOSA, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (IN)	OXYGEN, DISSOLVED (MG/L)
JUL								
31...	1010	75.0	--	50	6.80	31.0	67.0	7.9
31...	1011	75.0	5.0	49	6.90	30.5	--	7.9
31...	1012	75.0	10.0	50	6.70	27.0	--	7.1
31...	1013	75.0	12.0	54	6.70	24.0	--	3.2
31...	1014	75.0	15.0	49	5.90	22.5	--	1.9
31...	1015	75.0	17.0	49	5.80	22.0	--	1.7
31...	1016	75.0	20.0	50	5.80	21.5	--	1.3
31...	1017	75.0	22.0	52	5.70	20.5	--	1.1
31...	1018	75.0	25.0	54	5.80	19.5	--	1.0
31...	1019	75.0	30.0	56	5.80	16.0	--	1.9
31...	1020	75.0	35.0	56	5.80	13.5	--	3.5
31...	1021	75.0	40.0	55	5.90	12.0	--	3.6
31...	1022	75.0	45.0	56	5.90	11.5	--	3.5
31...	1023	75.0	50.0	56	5.80	11.0	--	3.6
31...	1024	75.0	55.0	56	5.90	11.0	--	3.7
31...	1025	75.0	60.0	57	5.90	10.5	--	3.3
31...	1026	75.0	61.0	57	5.90	10.5	--	3.2
31...	1027	50.0	--	49	6.70	30.5	--	7.1
31...	1028	50.0	5.0	49	6.80	30.5	--	7.8
31...	1029	50.0	10.0	52	6.50	27.0	--	6.4
31...	1030	50.0	12.0	53	6.00	24.5	--	3.4
31...	1031	50.0	15.0	51	5.80	22.5	--	2.0
31...	1032	50.0	17.0	48	5.80	22.0	--	1.7
31...	1033	50.0	20.0	50	5.70	21.5	--	1.3
31...	1034	50.0	22.0	52	5.80	20.5	--	1.0
31...	1035	50.0	25.0	55	5.80	19.0	--	1.1
31...	1036	50.0	30.0	56	5.80	17.0	--	1.4
31...	1037	50.0	35.0	55	5.80	13.5	--	3.2
31...	1038	50.0	40.0	55	5.90	12.5	--	3.5
31...	1039	50.0	45.0	56	5.90	11.5	--	3.6
31...	1040	50.0	50.0	56	5.90	11.0	--	3.7
31...	1041	50.0	55.0	56	5.90	10.5	--	3.7
31...	1042	50.0	60.0	57	6.00	10.5	--	3.4
31...	1043	50.0	62.0	57	6.00	10.5	--	3.2
31...	1044	25.0	--	49	6.70	31.0	--	7.8
31...	1045	25.0	5.0	48	6.80	30.5	--	7.8
31...	1046	25.0	10.0	49	6.70	27.5	--	7.2
31...	1047	25.0	12.0	53	6.10	24.0	--	4.1
31...	1048	25.0	15.0	48	5.90	22.5	--	2.0
31...	1049	25.0	17.0	47	5.80	22.0	--	1.7
31...	1050	25.0	20.0	50	5.80	21.0	--	1.2
31...	1051	25.0	22.0	51	5.80	20.5	--	1.1
31...	1052	25.0	25.0	53	5.80	19.5	--	1.0
31...	1053	25.0	30.0	56	5.80	16.0	--	1.8
31...	1054	25.0	35.0	55	5.80	14.0	--	3.2
31...	1055	25.0	40.0	55	5.90	12.5	--	3.5
31...	1056	25.0	45.0	55	5.90	11.5	--	3.5
31...	1057	25.0	50.0	55	5.90	11.0	--	3.6
31...	1058	25.0	55.0	56	5.90	10.5	--	3.7
31...	1059	25.0	60.0	56	5.90	10.5	--	3.6
31...	1100	25.0	65.0	57	5.90	10.5	--	3.3
31...	1101	25.0	68.0	57	5.90	10.5	--	3.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02464685 LAKE TUSCALOOSA AT SITE D NEAR TUSCALOOSA, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	OXYGEN, DIS-SOLVED (MG/L)
MAY								
19...	0945	25.0	--	68	6.60	22.0	128	9.5
19...	0946	25.0	5.0	69	6.70	22.0	--	9.1
19...	0947	25.0	10.0	68	6.70	21.5	--	9.1
19...	0948	25.0	15.0	67	6.70	20.5	--	8.7
19...	0949	25.0	20.0	68	6.50	16.5	--	9.2
19...	0950	25.0	25.0	68	6.50	14.0	--	8.9
19...	0951	25.0	30.0	67	6.40	13.0	--	8.7
19...	0952	25.0	35.0	67	6.40	13.0	--	8.5
19...	0953	25.0	40.0	67	6.30	11.0	--	8.9
19...	0954	25.0	45.0	66	6.20	11.0	--	8.6
19...	1010	50.0	--	68	6.60	22.0	--	9.0
19...	1011	50.0	5.0	68	6.70	22.0	--	9.1
19...	1012	50.0	10.0	68	6.70	21.5	--	8.9
19...	1013	50.0	15.0	65	6.70	20.0	--	8.3
19...	1014	50.0	20.0	68	6.60	15.0	--	7.7
19...	1015	50.0	25.0	68	6.50	14.0	--	8.9
19...	1016	50.0	30.0	67	6.50	13.0	--	8.9
19...	1017	50.0	35.0	68	6.40	11.5	--	9.3
19...	1018	50.0	40.0	67	6.40	11.0	--	9.6
19...	1019	50.0	45.0	68	6.40	10.5	--	9.9
19...	1020	50.0	50.0	68	6.40	10.0	--	9.9
19...	1021	50.0	55.0	69	6.40	10.0	--	9.9
19...	1022	50.0	57.0	69	6.40	10.0	--	8.4
19...	1030	75.0	--	68	6.60	22.0	--	9.0
19...	1031	75.0	5.0	68	6.60	22.0	--	9.0
19...	1032	75.0	10.0	68	6.70	21.5	--	9.0
19...	1033	75.0	15.0	66	6.70	19.5	--	8.5
19...	1034	75.0	20.0	68	6.60	15.5	--	8.8
19...	1035	75.0	25.0	67	6.50	14.0	--	8.9
19...	1036	75.0	30.0	68	6.40	12.5	--	8.8
19...	1037	75.0	35.0	67	6.40	11.5	--	8.8
19...	1038	75.0	40.0	68	6.40	10.5	--	9.4
19...	1039	75.0	45.0	68	6.40	10.0	--	9.5
19...	1040	75.0	50.0	69	6.40	10.0	--	9.5
19...	1041	75.0	55.0	69	6.40	10.0	--	9.7
19...	1042	75.0	60.0	68	6.40	10.0	--	9.8
19...	1043	75.0	55.0	69	6.40	10.0	--	9.7
19...	1044	75.0	68.0	69	6.40	10.0	--	9.3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02464685 LAKE TUSCALOOSA AT SITE D NEAR TUSCALOOSA, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	OXYGEN, DIS-SOLVED (MG/L)
JUL								
31...	0940	75.0	--	49	6.80	31.0	65.5	7.5
31...	0941	75.0	5.0	49	6.90	31.0	--	7.7
31...	0942	75.0	10.0	52	6.40	26.0	--	5.7
31...	0943	75.0	12.0	52	5.80	24.0	--	3.0
31...	0944	75.0	15.0	48	5.80	23.0	--	2.8
31...	0945	75.0	17.0	49	5.70	22.0	--	2.0
31...	0946	75.0	20.0	51	5.70	21.5	--	1.6
31...	0947	75.0	22.0	52	5.70	21.0	--	1.3
31...	0948	75.0	25.0	55	5.70	20.0	--	1.1
31...	0949	75.0	30.0	58	5.80	17.5	--	1.6
31...	0950	75.0	35.0	56	5.80	14.0	--	3.8
31...	0951	75.0	40.0	55	5.80	12.5	--	4.4
31...	0952	75.0	45.0	55	5.90	11.5	--	4.7
31...	0953	75.0	50.0	56	5.80	11.0	--	5.0
31...	0954	75.0	55.0	56	5.90	11.0	--	5.0
31...	0955	75.0	60.0	56	5.90	10.5	--	5.1
31...	0956	75.0	65.0	57	5.90	10.5	--	4.9
31...	0957	50.0	--	47	6.60	31.0	--	7.6
31...	0958	50.0	5.0	47	6.80	30.5	--	7.7
31...	0959	50.0	10.0	50	6.40	26.0	--	6.0
31...	1000	50.0	12.0	49	6.10	24.0	--	3.2
31...	1001	50.0	15.0	47	5.80	22.5	--	2.2
31...	1002	50.0	17.0	49	5.80	22.0	--	1.4
31...	1003	50.0	20.0	51	5.70	21.5	--	1.1
31...	1004	50.0	22.0	51	5.70	21.0	--	0.8
31...	1005	50.0	25.0	53	5.70	20.0	--	0.8
31...	1006	50.0	30.0	58	5.80	17.0	--	1.7
31...	1007	50.0	35.0	54	5.80	14.0	--	3.6
31...	1008	50.0	40.0	55	5.90	12.5	--	4.3
31...	1009	50.0	45.0	55	5.80	11.5	--	4.5
31...	1010	50.0	50.0	56	5.90	11.0	--	4.9
31...	1011	50.0	55.0	56	5.90	10.5	--	5.2
31...	1012	50.0	60.0	56	6.00	10.5	--	5.1
31...	1013	50.0	65.0	56	5.90	10.5	--	4.7
31...	1014	50.0	68.0	58	6.00	10.5	--	3.8
31...	1015	25.0	--	48	6.60	30.5	--	7.7
31...	1016	25.0	5.0	48	6.70	30.5	--	7.8
31...	1017	25.0	10.0	52	6.40	25.5	--	5.2
31...	1018	25.0	12.0	49	5.90	24.0	--	4.1
31...	1019	25.0	15.0	48	5.80	22.5	--	2.1
31...	1020	25.0	17.0	49	5.80	22.0	--	1.8
31...	1021	25.0	20.0	51	5.80	21.5	--	1.3
31...	1022	25.0	22.0	52	5.70	21.0	--	1.1
31...	1023	25.0	25.0	53	5.70	20.0	--	1.0
31...	1024	25.0	30.0	58	5.80	16.5	--	2.2
31...	1025	25.0	35.0	55	5.80	14.0	--	3.8
31...	1026	25.0	40.0	54	5.90	12.5	--	4.4
31...	1027	25.0	45.0	55	5.80	11.5	--	4.7
31...	1028	25.0	49.0	55	5.90	11.0	--	4.8

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

02470040 TOMBIGBEE RIVER NEAR JACKSON, AL

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV					
22...	0845	25.0	40000	206	22200
22...	0850	50.0	40000	293	31600
22...	0855	75.0	40000	479	51700
JAN					
06...	1226	25.0	75500	139	28300
06...	1240	50.0	75500	140	28500
06...	1245	75.0	75500	218	44400
FEB					
07...	0724	25.0	33000	37	3300
07...	0731	50.0	33000	38	3390
07...	0735	75.0	33000	45	4010
MAR					
31...	1240	25.0	50000	40	5400
31...	1249	50.0	50000	28	3780
31...	1253	75.0	50000	40	5400
MAY					
04...	1251	25.0	10000	184	4970
04...	1253	50.0	10000	234	6320
04...	1305	75.0	10000	385	10400
JUN					
14...	1508	25.0	35500	84	8050
14...	1512	50.0	35500	97	9300
14...	1521	75.0	35500	133	12700
AUG					
02...	1600	25.0	9500	8	205
02...	1610	50.0	9500	19	487
02...	1615	75.0	9500	21	539
SEP					
14...	1310	25.0	7300	33	650
14...	1320	50.0	7300	40	788
14...	1330	75.0	7300	56	1100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

325645088100700 - TOMBIGBEE RIVER AT COOKS BEND IN CUT AT SED RANGE 4

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM
JAN							
13...	1315	25.0	26100	477	33600	--	--
13...	1320	50.0	26100	528	37200	--	--
13...	1325	75.0	26100	545	38400	--	--
13...	1505	25.0	39400	546	58100	--	--
13...	1510	50.0	39400	721	76700	--	--
13...	1515	75.0	39400	630	67000	--	--
15...	1245	25.0	52800	419	59700	--	--
15...	1250	50.0	52800	349	49800	--	--
15...	1255	75.0	52800	347	49500	--	--
17...	1305	25.0	57300	192	29700	--	--
17...	1310	50.0	57300	191	29500	--	--
17...	1315	75.0	57300	195	30200	--	--
19...	0936	25.0	40000	73	7880	--	--
19...	0939	50.0	40000	61	6590	--	--
19...	0942	75.0	40000	68	7340	--	--
19...	1259	25.0	37800	62	6330	--	--
19...	1304	50.0	37800	59	6020	--	--
19...	1306	75.0	37800	53	5410	--	--
20...	0815	25.0	--	--	--	0	0
20...	0830	50.0	--	--	--	--	--
20...	0845	75.0	--	--	--	0	0

DATE	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JAN							
20...	3	35	39	41	47	64	91
20...	--	--	--	--	--	--	--
20...	0	20	58	66	73	83	97

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

3320300882122 TOMBIGBEE RIVER HAIRSTON BEND IN CUT NEAR COLUMBUS, MS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
MAR					
06...	1315	75.0	60200	460	74800
06...	1317	50.0	60200	464	75400
06...	1319	25.0	60200	422	68600
07...	1233	75.0	50400	192	26100
07...	1237	50.0	50400	176	24000
07...	1238	25.0	50400	173	23500
08...	1315	25.0	45300	118	14400
08...	1320	50.0	45300	147	18000
08...	1325	75.0	45300	126	15400

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

332100088224B TOMBIGBEE RIVER HAIRSTON BEND OLD CHANNEL NEAR COLUMBUS, MS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM
MAR							
06...	1252	25.0	9030	435	10600	--	--
06...	1255	50.0	9030	437	10700	--	--
06...	1258	75.0	9030	403	9830	--	--
07...	1302	75.0	5580	167	2520	--	--
07...	1305	50.0	5580	182	2740	--	--
07...	1307	25.0	5580	221	3330	--	--
08...	1340	25.0	6000	125	2020	--	--
08...	1345	50.0	6000	121	1960	--	--
08...	1350	75.0	6000	125	2020	--	--
JUN							
06...	1245	25.0	--	--	--	0	0
06...	1300	50.0	--	--	--	1	3
06...	1315	75.0	--	--	--	0	1

DATE	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JUN							
06...	0	1	1	2	3	3	9
06...	8	23	30	35	40	48	59
06...	1	1	2	2	3	4	14

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

3321120882235 TOMBIGBEE RIVER AT HAIRSTON BEND ABOVE CUT NEAR COLUMBUS, MS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM
MAR							
06...	1303	75.0	69200	426	79600	--	--
06...	1306	50.0	69200	460	85900	--	--
06...	1308	25.0	69200	446	83300	--	--
07...	1316	25.0	56000	190	28700	--	--
07...	1318	50.0	56000	173	26200	--	--
07...	1320	75.0	56000	178	26900	--	--
08...	1150	75.0	51300	117	16200	--	--
08...	1152	50.0	51300	142	19700	--	--
08...	1155	25.0	51300	133	18400	--	--
JUN							
06...	1115	25.0	--	--	--	0	1
06...	1130	50.0	--	--	--	0	1
06...	1145	75.0	--	--	--	0	4
06...	1200	25.0	--	--	--	0	2
06...	1215	50.0	--	--	--	0	2
06...	1230	75.0	--	--	--	0	1

DATE	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JUN							
06...	3	5	6	6	9	16	55
06...	5	16	28	31	34	48	69
06...	13	18	24	30	41	62	89
06...	8	17	20	24	33	51	91
06...	28	32	42	46	56	72	97
06...	2	4	5	7	12	24	50

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

332751088261000 TOMBIGBEE RIVER IN COLUMBUS CUT NEAR COLUMBUS, MS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM
MAR							
05...	1620	25.0	37100	150	15000	--	--
05...	1623	50.0	37100	149	14900	--	--
05...	1635	75.0	37100	165	16500	--	--
06...	1011	75.0	46800	405	51200	--	--
06...	1012	50.0	46800	405	51200	--	--
06...	1015	25.0	46800	376	47500	--	--
07...	0856	25.0	36500	156	15400	--	--
07...	0900	50.0	36500	165	16300	--	--
07...	0903	75.0	36500	172	17000	--	--
08...	0830	25.0	36400	109	10700	--	--
08...	0840	50.0	36400	106	10400	--	--
08...	0850	75.0	36400	100	9830	--	--
JUN							
05...	1700	25.0	--	--	--	0	2
05...	1715	50.0	--	--	--	0	5
05...	1730	75.0	--	--	--	3	8

DATE	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JUN							
05...	12	64	86	90	92	96	98
05...	25	100	100	100	100	100	100
05...	29	82	86	90	95	99	100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

332929088273300 TOMBIGBEE RIVER ABOVE CUT NEAR COLUMBUS, MS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM
MAR							
05...	1640	25.0	46200	149	18600	--	--
05...	1642	50.0	46200	173	21600	--	--
05...	1645	75.0	46200	202	25200	--	--
06...	1023	75.0	61000	394	64900	--	--
06...	1025	25.0	61000	378	62300	--	--
06...	1027	50.0	61000	420	69200	--	--
07...	0909	75.0	43000	159	18500	--	--
07...	0915	50.0	43000	168	19500	--	--
07...	0918	25.0	43000	168	19500	--	--
08...	0800	25.0	43500	100	11700	--	--
08...	0805	50.0	43500	106	12400	--	--
08...	0810	75.0	43500	103	12100	--	--
JUN							
05...	1530	25.0	--	--	--	0	2
05...	1545	50.0	--	--	--	0	1
05...	1600	75.0	--	--	--	0	4

DATE	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JUN							
05...	21	32	36	39	47	65	96
05...	4	9	11	13	19	35	80
05...	29	48	51	52	60	76	96

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

SPECIFIC CONDUCTANCE AND TEMPERATURE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

APALACHICOLA RIVER BASIN

02339225 WEHADKEE CREEK BELOW ROCK MILLS, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
MAR 01...	0905	95	33	9.0					

02342500 UCHEE CREEK NEAR FORT MITCHELL, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
FEB 28...	1510	274	44	11.0					

02342933 SOUTH FORK COWIKEE CREEK NEAR BATESVILLE, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
FEB 28...	1210	97	118	14.0	MAY 03...	1045	159	86	17.0

02343300 ABBIE CREEK NEAR HALEBURG, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
MAR 16...	1515	87	47	19.5

CHOCTAWHATCHEE RIVER BASIN

02362240 LITTLE DOUBLE BRIDGES CREEK NEAR ENTERPRISE, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
FEB 01...	1213	19	36	14.0	MAR 16...	1129	20	31	20.0

02363000 PEA RIVER NEAR ARITON, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
MAR 20...	1130	279	81	20.5					

02364570 PANTHER CREEK NEAR HACODA, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
MAR 16...	0923	18	36	20.0					

ESCAMBIA RIVER BASIN

02371500 CONECUH RIVER AT BRANTLEY, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
JAN 31...	1320	233	90	13.0	MAR 17...	1315	298	97	20.0

02372250 PATSALIGA CREEK NEAR BRANTLEY, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
JAN 31...	1130	227	94	13.5					

02373000 SEPULGA RIVER NEAR MCKENZIE, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 04...	0837	822	54	21.0	JAN 04...	0926	836	54	12.5
NOV 15...	0907	142	68	17.0					

02374500 MURDER CREEK NEAR EVERGREEN, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 04...	1048	340	43	20.0	NOV 15...	1058	210	38	17.5

PERDIDO RIVER BASIN

02377570 STYX RIVER NEAR ELSANOR, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 06...	1215	493	26	19.0	JAN 06...	1035	208	29	16.0
NOV 17...	0958	319	33	19.0	MAR 15...	1320	170	25	19.5

02377960 BLACKWATER RIVER NEAR ELSANOR, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 06...	1017	138	45	18.0	MAR 15...	1150	49	67	20.0
NOV 17...	0800	105	49	19.0					

SPECIFIC CONDUCTANCE AND TEMPERATURE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

FISH RIVER BASIN

02378500 FISH RIVER NEAR SILVER HILL, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT					JAN				
06...	0822	113	37	18.0	06...	0843	79	41	16.0
NOV					MAR				
16...	1329	87	38	20.5	15...	1005	67	38	20.0

MOBILE RIVER BASIN

02397660 LUMPKIN MILL CREEK NEAR FORNEY, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
SEP				
12...	1130	4.2	225	19.0

02398300 CHATTOOGA RIVER ABOVE GAYLESVILLE, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
NOV					JUN				
09...	1325	160	206	13.0	08...	1425	351	300	21.0
FEB					JUL				
16...	1026	488	280	14.0	20...	1308	798	195	24.0
APR					AUG				
27...	1322	402	330	20.5	28...	1040	351	241	23.0

02399200 LITTLE RIVER NEAR BLUE POND, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
NOV					APR				
09...	1110	180	43	12.5	27...	1146	122	34	21.5
DEC					JUN				
07...	0900	214	32	6.5	08...	1221	244	35	21.5
FEB					JUL				
14...	1145	375	33	11.0	17...	1044	180	32	24.0
MAR					AUG				
28...	1300	492	31	15.0	30...	1323	55	43	26.5

02399880 SOUTH FORK TERRAPIN CREEK NEAR GRANTLEY, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
SEP				
11...	1502	4.5	49	24.0

02399885 MARYS CREEK NEAR GRANTLEY, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
SEP				
11...	1548	2.6	58	22.0

02400100 TERRAPIN CREEK AT ELLISVILLE, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
NOV					APR				
08...	1225	74	185	14.0	06...	0830	2010	132	13.5
DEC					27...	0916	204	152	21.0
06...	1445	107	186	9.0	JUN				
FEB					08...	1000	161	167	22.0
14...	0826	258	148	12.0	AUG				
					30...	1125	154	165	25.0

02401000 BIG WILLS CREEK NEAR REECE CITY, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
NOV					APR				
08...	0715	111	290	12.5	26...	1634	218	255	21.0
FEB					JUN				
14...	1438	325	242	13.0	09...	0913	156	270	20.0
MAR					AUG				
20...	1505	250	258	16.0	30...	0915	115	285	23.5

02401370 BIG CANOE CREEK NEAR SPRINGVILLE, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
NOV					JUN				
07...	0835	82	101	13.0	06...	1245	81	177	21.0
DEC					JUL				
05...	1020	66	129	8.0	18...	0937	40	158	21.0
FEB					AUG				
13...	1325	82	145	11.0	29...	1136	12	230	25.0
APR									
05...	0930	758	98	13.0					
26...	1255	42	173	19.5					

SPECIFIC CONDUCTANCE AND TEMPERATURE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

MOBILE RIVER BASIN--Continued

02401374 LITTLE CANOE CREEK NEAR SPRINGVILLE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
JUL 18...	1114	6.1	189	21.0					

02401390 BIG CANOE CREEK AT ASHVILLE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 07...	1015	159	102	13.0	JUN 06...	1100	78	225	22.5
DEC 06...	0800	150	160	7.5	JUL 18...	1505	119	155	23.5
FEB 13...	1122	214	167	9.5	AUG 29...	1000	34	240	26.0
APR 26...	1130	106	290	20.0					

02401470 LITTLE CANOE CREEK NEAR STEELE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 07...	1530	11	143	13.5	APR 04...	0725	293	77	13.0
					06...	1215	129	82	14.0
DEC 05...	0845	29	112	8.0	26...	1442	17	158	20.0
FEB 13...	1508	40	105	11.5	JUN 06...	1427	15	152	22.0
MAR 22...	0831	53	102	12.0	JUL 18...	0715	92	86	20.0
					AUG 30...	0735	7.6	175	22.5

02403085 CHOCCOLOCCO CREEK NEAR RABBITTOWN, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
JUL 19...	0918	6.8	38	19.5	SEP 12...	0755	3.5	46	20.0

02403500 W 12 COLDWATER SPRING NEAR ANNISTON, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
DEC 06...	1100	12	196	17.0	JUL 19...	1122	25	200	18.0

02404400 CHOCCOLOCCO CREEK AT JACKSON SHOAL NEAR LINCOLN, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
JAN 10...	1410	542	175	12.5					

02405500 KELLY CREEK NEAR VINCENT, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 07...	1305	130	53	13.0	MAY 06...	1240	3210	45	13.0
DEC 05...	1300	186	52	8.0	JUN 06...	0905	34	102	22.0
FEB 13...	0840	269	58	8.0	JUL 18...	1315	119	66	24.0
APR 26...	0850	109	69	19.0	AUG 29...	0745	21	91	24.0

02406500 TALLADEGA CREEK AT ALPINE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
JAN 11...	0855	187	130	13.0	APR 26...	1325	244	180	20.0
MAR 02...	0930	357	104	9.5					

02408540 HATCHET CREEK BELOW ROCKFORD, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
JAN 11...	1120	304	31	12.0	APR 26...	1045	444	34	19.0

02412000 TALLAPOOSA RIVER NEAR HEFLIN, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
JAN 10...	1050	372	37	11.0	APR 27...	1020	412	38	20.0

02412177 CAHULGA CREEK AT HEFLIN, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 08...	1000	2.8	58	13.0	DEC 06...	1225	2.3	59	9.0

SPECIFIC CONDUCTANCE AND TEMPERATURE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

MOBILE RIVER BASIN--Continued

02413300 LITTLE TALLAPOOSA RIVER NEAR NEWELL, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
MAR 01...	1220	1270	46	10.5	APR 27...	1215	349	53	21.0

02415000 HILLABEE CREEK NEAR HACKNEYVILLE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
JAN 09...	1200	205	30	10.5	APR 19...	1200	390	45	18.0
FEB 27...	1350	236	33	11.0					

02421000 CATOMA CREEK NEAR MONTGOMERY, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
AUG 08...	1130	22	300	27.0					

02422500 MULBERRY CREEK AT JONES, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 31...	1046	89	37	16.0	APR 10...	0950	1980	25	14.5
DEC 12...	1024	149	38	8.0	MAY 22...	1105	139	34	23.0
JAN 17...	1157	293	42	9.5	JUL 10...	1153	308	37	18.0
FEB 27...	1007	186	35	3.5	AUG 21...	1011	98	36	25.5

02423130 CAHABA RIVER AT TRUSSVILLE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 04...	1115	1.4	104	18.0	DEC 07...	0745	1.2	91	8.0
NOV 02...	0900	1.0	148	11.5	JAN 05...	0730	1.7	75	8.0
					13...	1145	3.0	65	13.5

02423380 CAHABA RIVER NEAR MOUNTAIN BROOK, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
JAN 23...	0950	195	150	6.0	MAY 22...	1135	47	205	23.0
FEB 28...	1335	2930	105	9.5	SEP 13...	0958	3.9	216	26.0
MAR 13...	1010	306	152	13.0					

02423496 CAHABA RIVER NEAR HOOVER, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 17...	0845	5.4	275	14.0	FEB 27...	0905	214	155	8.5
NOV 15...	1300	35	260	15.5	MAR 20...	1020	121	198	16.5
DEC 15...	1100	14	206	7.5					

02423500 CAHABA RIVER NEAR ACTON, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 17...	1200	18	390	17.5	APR 18...	1115	254	190	16.5
DEC 15...	0900	24	290	10.0	MAY 18...	1145	48	255	20.0
FEB 27...	1205	236	185	9.0	JUL 20...	1415	139	220	26.0
MAR 20...	0835	124	210	16.0	AUG 17...	1055	26	345	25.0

02424000 CAHABA RIVER AT CENTREVILLE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 18...	1325	185	270	19.0	APR 19...	0930	1410	200	18.5
NOV 28...	1350	3370	150	13.5	MAY 30...	1300	405	280	28.5
JAN 11...	1230	2790	175	11.0	JUL 07...	1435	8340	114	23.0
FEB 22...	1235	2950	175	11.0	AUG 18...	1055	608	270	25.0

SPECIFIC CONDUCTANCE AND TEMPERATURE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

MOBILE RIVER BASIN--Continued

02424590 CAHABA RIVER NEAR SUTTLE, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 31...	1248	414	214	17.0	APR 10...	1236	8020	99	15.5
DEC 12...	1228	842	170	9.0	MAY 22...	1316	1080	166	25.0
FEB 27...	1216	1820	140	5.0	AUG 21...	1310	750	220	26.0

02425000 CAHABA RIVER NEAR MARION JUNCTION, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 31...	1621	490	192	16.5	MAY 22...	1543	1170	156	25.5
DEC 13...	0812	1000	150	7.0	AUG 22...	0840	821	207	28.0
FEB 28...	0941	2330	136	5.0					

02427700 TURKEY CREEK AT KIMBROUGH, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
NOV 02...	0747	18	116	13.0	APR 11...	0941	521	62	3.5
DEC 13...	1118	52	106	7.5	MAY 23...	1013	41	90	23.0
JAN 18...	0930	137	102	8.5	JUL 11...	0909	41	108	18.0
FEB 28...	1239	139	120	5.0	AUG 22...	1418	11	108	27.5

02448890 BODKA CREEK NEAR EMELLE, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 20...	0930	1.9	240	13.5	APR 12...	1415	208	140	12.5
DEC 07...	1135	12	300	9.5	MAY 06...	1105	204	119	25.0
FEB 01...	1230	155	134	14.0	AUG 16...	0850	1.7	370	25.0
24...	0855	145	155	4.5					

02449245 BRUSH CREEK NEAR EUTAW, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 19...	1230	0.24	290	17.0	APR 13...	1550	61	56	14.5
NOV 29...	1200	29	100	9.5	MAY 25...	1200	52	59	22.5
DEC 02...	1130	0.72	134	8.0	JUL 06...	1600	147	50	24.5
JAN 13...	1535	263	66	11.0	AUG 17...	1240	20	70	23.0
FEB 23...	1315	35	75	6.5					

02450000 MULBERRY FORK NEAR GARDEN CITY, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
DEC 08...	0935	401	90	8.0	JUN 01...	1240	77	122	28.0
APR 20...	1350	386	65	17.0	SEP 14...	1530	107	116	27.0

02450180 MULBERRY FORK NEAR ARKADELPHIA, AL

DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	DISCHARGE, INST. (FT3/S)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
DEC 08...	1345	497	95	8.0	SEP 14...	0735	144	158	26.5
JUN 01...	1425	114	132	28.0					

SPECIFIC CONDUCTANCE AND TEMPERATURE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

MOBILE RIVER BASIN--Continued

02450285 NORTH FORK OF CANEY CREEK NEAR ASHRIDGE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
SEP 13...	1242	2.2	24	23.0

02453000 BLACKWATER CREEK NEAR MANCHESTER, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
DEC 07...	1040	172	92	7.0	JUN 02...	1010	50	148	24.0
MAR 27...	0940	321	86	13.5	SEP 09...	0923	32	140	23.0
APR 19...	0850	194	106	16.0					

02455000 LOCUST FORK NEAR CLEVELAND, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
MAY 24...	1415	229	128	23.5

02455980 TURKEY CREEK AT SEWAGE PLANT NEAR PINSON, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 04...	1345	30	298	18.0	DEC 07...	1040	34	282	11.0
NOV 01...	1400	17	292	16.0	JAN 04...	1400	94	252	12.0
					13...	1450	279	185	13.0

02456330 CROOKED CREEK NEAR MORRIS, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
DEC 07...	1540	12	205	9.0

02456500 LOCUST FORK AT SAYRE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
DEC 07...	1420	896	162	3.0	SEP 07...	1354	131	285	27.5
MAY 24...	1045	658	152	25.0					

02458300 VILLAGE CREEK AT 24TH ST AT BIRMINGHAM, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 04...	1515	26	670	20.0	MAY 03...	1240	20	418	20.0
NOV 01...	1155	15	400	16.0	30...	1305	17	425	26.0
DEC 06...	1345	17	465	12.0	JUL 06...	0710	56	432	22.0
JAN 03...	1415	232	268	15.0	AUG 01...	1240	13	400	26.0
31...	1345	25	415	15.0	SEP 05...	1325	8.5	400	26.0
MAR 07...	1400	62	325	9.5					

02458450 VILLAGE CREEK AT AVENUE W AT ENSLEY, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 05...	1045	35	512	17.0	APR 04...	1145	252	205	18.0
NOV 01...	0955	20	440	16.0	MAY 02...	1110	32	425	21.0
DEC 06...	1135	30	520	10.0	30...	1115	26	415	26.0
JAN 03...	1200	139	258	14.0	JUL 06...	1155	83	362	25.0
31...	1145	37	545	12.5	AUG 01...	1100	19	375	26.0
MAR 07...	1210	109	270	9.5	SEP 05...	1105	17	400	26.0

SPECIFIC CONDUCTANCE AND TEMPERATURE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

MOBILE RIVER BASIN--Continued

02462000 VALLEY CREEK NEAR OAK GROVE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 06...	1300	160	550	16.0	JUN 01...	0925	147	567	25.5
NOV 03...	1015	134	560	16.0	JUL 07...	0920	560	540	25.5
DEC 08...	1035	204	545	10.0	AUG 03...	0940	175	548	26.0
JAN 03...	1200	374	540	11.0	SEP 07...	1010	126	552	25.0
MAY 04...	0840	170	540	16.0					

02465493 ELLIOTTS CREEK AT MOUNDVILLE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 18...	1000	11	19	15.0	APR 14...	1545	44	20	14.5
NOV 28...	1015	62	23	11.5	MAY 26...	1330	20	24	25.0
JAN 09...	1620	42	34	9.0	JUL 11...	1113	77	19	23.0
FEB 22...	1025	58	21	<3.0	AUG 18...	1600	11	25	24.0

02467500 SUCARNOOCHEE RIVER AT LIVINGSTON, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 19...	1640	122	84	17.5	APR 13...	1050	2100	82	12.5
NOV 30...	0830	1660	92	11.5	MAY 24...	1320	3430	67	22.0
JAN 15...	1305	2000	98	11.5	AUG 16...	1445	182	70	26.0
FEB 23...	1755	1730	74	9.5					

02468500 CHICKASAW BOGUE NEAR LINDEN, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 19...	0930	5	255	19.5

02469800 SATILPA CREEK NEAR COFFEEVILLE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 28...	1121	32	124	17.0	APR 12...	0851	804	63	5.0
DEC 14...	0849	138	100	7.0	MAY 24...	0823	552	59	14.5
JAN 19...	0813	270	90	10.0	AUG 23...	0728	41	68	26.0
MAR 01...	0844	307	78	4.5					

02471001 CHICKASAW CREEK NEAR KUSHLA, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
MAR 02...	1213	167	28	6.5	JUL 13...	1239	118	32	26.5
APR 13...	1148	142	24	8.0	AUG 24...	1158	64	26	27.5
MAY 25...	1241	595	28	16.5					

PASCAGOULA RIVER BASIN

02479431 POND CREEK NEAR DEER PARK, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 16...	1010	16	27	19.5	MAY 24...	1708	208	26	16.5
JAN 05...	1102	11	31	10.5	JUL 12...	1506	24	25	19.0
MAR 01...	1457	17	25	5.5	AUG 23...	1534	1	25	29.0
APR 12...	1632	32	21	6.5					

SPECIFIC CONDUCTANCE AND TEMPERATURE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

TENNESSEE RIVER BASIN

03572110 CROW CREEK AT BASS, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 11...	1110	85	225	13.0	JUN 05...	1302	45	230	21.5
DEC 07...	1420	107	228	10.0	JUL 17...	1515	129	228	20.0
MAR 16...	1157	194	219	13.0	AUG 28...	1400	50	250	22.5
APR 24...	1230	112	230	18.0					

03574500 PAINT ROCK RIVER NEAR WOODVILLE, AL

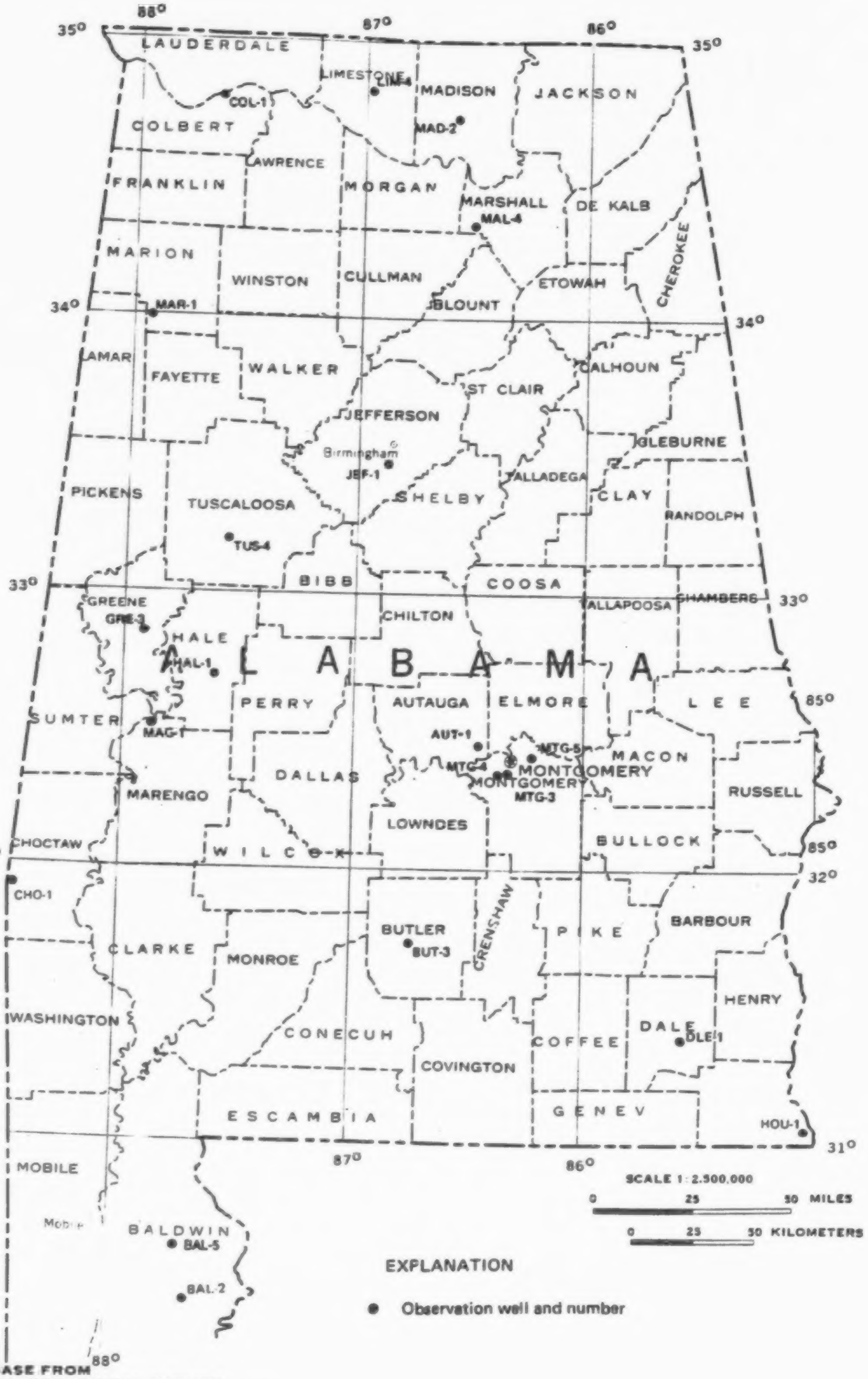
DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
APR 28...	0851	190	250	21.0	JUL 21...	1208	245	270	22.5
JUN 05...	1026	87	248	22.5	AUG 17...	1110	96	296	23.5
					25...	1030	39	304	25.0

03575000 FLINT RIVER NEAR CHASE, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
DEC 05...	1115	287	142	9.0	MAY 30...	1235	181	142	21.0
FEB 13...	1425	481	116	12.0	JUL 17...	1250	493	111	23.0
MAR 28...	1305	524	105	18.0	SEP 05...	1337	143	140	22.0
APR 17...	1615	481	100	18.0					

03575830 INDIAN CREEK NEAR MADISON, AL

DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	DIS-CHARGE, INST. (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
DEC 05...	1330	26	127	8.0	APR 18...	1500	81	113	18.0
JAN 09...	1550	164	144	8.0	MAY 30...	1005	16	160	21.0
FEB 03...	1125	78	158	11.0	JUL 17...	1005	81	170	21.0
MAR 20...	1215	228	120	13.5	SEP 05...	1522	8	200	24.5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MAD-2
LAWRENCE
FRANKLIN
MORGAN
MARSHALL
DE KALB
MAL-4
MARION
WINSTON
CULLMAN
ETOWAH
CHEROKEE
BLOUNT
MAR-1
LAMAR
FAYETTE
WALKER
CALHOUN
ST CLAIR
JEFFERSON
CLEBURNE
Birmingham
JEF-1
PICKENS
TUSCALOOSA
SHELBY
TALLADEGA
CLAY
RANDOLPH
TUS-4
BIBB
COOSA
GREENE
GRE-3
CHILTON
TALLAPOOSA
CHAMBERS
HALE
HAL-1
ALABAMA
PERRY
AUTAUGA
ELMORE
LEE
SUMTER
MAG-1
AUT-1
MTG-5
MACON
MTG-4
MONTGOMERY
MONTGOMERY
MTG-3
DALLAS
MARENGO
RUSSELL
LOWNDES
CHOCTAW
WILCOX
BULLOCK
CHO-1
BUTLER
BUT-3
CRENSHAW
PIKE
BARBOUR
CLARKE
MONROE
HENRY
WASHINGTON
CONECUH
DALE
DLE-1
COFFEE
COVINGTON
ESCAMBIA
GENEVA
HOU-1
MOBILE
Mobile
BALDWIN
BAL-5
BAL-2
SCALE 1:2,500,000
0 25 50 MILES
0 25 50 KILOMETERS
EXPLANATION
● Observation well and number

BASE FROM
U.S. GEOLOGICAL SURVEY
UNITED STATES BASE MAP, 1980

Figure 7.--Location of observation wells.

AUTAUGA COUNTY

322755086244301. Local number, Aut-1.

LOCATION.--Lat 32°27'55", long 86°24'43", Hydrologic Unit 03150201, in SE¼ sec. 12, T. 17 N., R. 16 E., 0.3 mi east of County Road 75, 0.5 mi north of County Road 2 (Cobbs Ford Road), and 3.5 mi east of Prattville. Owner: H. Glen Peddy.

AQUIFER.--Sand of Gordo Formation of Late Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in., depth 275 ft, screened 265 to 275 ft.

DATUM.--Elevation of land surface datum is 355 ft. Measuring point: Top of casing, 1.70 ft above land-surface datum.

REMARKS.--Water levels affected by pumping of nearby wells.

PERIOD OF RECORD.--January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level, 114.04 ft below land-surface datum, Apr. 5-7, 1985; lowest recorded water level, 121.52 ft below land-surface datum, Sept. 20, 21, 1989.

EXTREMES FOR CURRENT YEAR.--Highest recorded water level, 119.02 ft below land-surface datum, Mar. 5-7; lowest recorded water level, 121.52 ft below land-surface datum, Sept. 20, 21.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	119.89	119.92	120.22	119.68	119.27	119.04	119.70	119.89	120.37	119.69	119.76	120.58
10	120.08	120.05	120.18	119.60	119.40	119.17	119.69	119.96	120.20	119.76	119.75	120.83
15	120.17	120.13	120.17	119.55	119.28	119.08	119.78	119.95	120.10	119.73	119.94	121.29
20	120.04	120.06	120.28	119.47	119.24	119.18	119.75	120.05	119.94	119.71	120.00	121.50
25	119.91	120.09	120.24	119.38	119.22	119.35	119.74	120.08	119.91	119.79	120.01	121.44
EOM	120.04	120.09	119.92	119.23	119.07	119.55	119.75	120.29	119.84	119.76	120.16	121.25
MAX	120.17	120.13	120.30	119.78	119.40	119.59	119.80	120.29	120.37	119.84	120.16	121.52

BALDWIN COUNTY

301651087385601. Local number, Bal-2.

LOCATION.--Lat 30°16'51", long 87°38'56", Hydrologic Unit 03160205, in NW¼ sec. 11, T. 9 S., R. 4 E., on State Highway 180, and 3 mi east of Gulf Shores.

OWNER.--Alabama Gulf Utilities.

AQUIFER.--Undifferentiated Sand of Miocene Age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 4 in., depth 130 ft.

DATUM.--Elevation of land-surface datum is 9.0 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.57 ft above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--March 1985 to March 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 4.29 ft below land-surface datum, Oct. 31, Nov. 1, 1985; lowest recorded, 8.22 ft below land-surface datum, Aug. 1, 1986.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 4.75 ft below land-surface datum, Oct. 3; lowest recorded, 7.66 ft below land-surface datum, Feb. 25.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.27	5.94	6.96	7.24	7.37	6.95	---	---	---	---	---	---
10	5.54	6.45	6.97	7.06	7.63	7.32	---	---	---	---	---	---
15	5.82	6.47	6.82	7.05	7.56	7.10	---	---	---	---	---	---
20	5.98	6.22	6.87	7.25	7.34	7.35	---	---	---	---	---	---
25	6.10	6.76	7.02	7.25	7.66	7.07	---	---	---	---	---	---
EOM	6.24	6.74	6.91	7.33	7.19	---	---	---	---	---	---	---
MAX	6.34	6.82	7.06	7.46	7.66	---	---	---	---	---	---	---

BALDWIN COUNTY

302428087410401. Local number, Bal-5.

LOCATION.--Lat 30°24'28", long 87°41'04", Hydrologic Unit 03160205, in SE¼SE¼NE¼ sec. 29, T. 7 S., R. 4 E., in parking lot of Foley Police Department, one block west of State Highway 59, Foley.

OWNER.--Riviera Utilities.

AQUIFER.--Sand of Miocene age undifferentiated.

WELL CHARACTERISTICS.--Drilled observation well, diameter 12 in., depth 137 ft.

DATUM.--Elevation of land-surface datum is 82 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.17 ft above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--March 1987 to March 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 19.13 ft below land-surface datum, Oct. 18, 1988; lowest recorded, 22.93 ft below land-surface datum, March 10, 1987.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 19.13 ft below land-surface datum, Oct. 18; lowest recorded, 22.00 ft below land-surface datum, March 31.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.67	19.47	19.98	20.39	20.98	21.59	---	---	---	---	---	---
10	19.30	19.61	20.04	20.52	21.13	21.66	---	---	---	---	---	---
15	19.20	19.67	20.09	20.60	21.27	21.78	---	---	---	---	---	---
20	19.21	19.77	20.20	20.69	21.32	21.85	---	---	---	---	---	---
25	19.31	19.78	20.28	20.77	21.45	21.92	---	---	---	---	---	---
EOM	19.38	19.93	20.31	20.89	21.53	---	---	---	---	---	---	---
MAX	19.96	19.93	20.32	20.89	21.53	---	---	---	---	---	---	---

BUTLER COUNTY

314355086440501. Local number, But-3.

LOCATION.--Lat 31°43'55", long 86°44'05", Hydrologic Unit 03140303, in SW¼ sec. 23, T. 9 N., R. 13 E., at junction county roads 25 and 28, and 9 mi southwest of Greenville.
Owner: U.S. Geological Survey.

AQUIFER.--Nanafalia Formation of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 213 ft, screened 203 to 213 ft.

DATUM.--Elevation of land-surface datum is 370 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.54 ft above land-surface datum. Auxilliary measuring point: Recorder shelter floor 2.96 ft above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--February 1970 to March 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 69.75 ft below land-surface datum May 14, 1976; lowest recorded, 76.36 ft below land-surface datum, Nov. 17-19, 1983.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 75.34 ft below land-surface datum, Mar. 30; lowest recorded, 75.89 ft below land-surface datum, Oct. 18, 20.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	75.75	75.71	75.82	75.63	75.62	75.52	---	---	---	---	---	---
10	75.79	75.80	75.82	75.71	75.62	75.54	---	---	---	---	---	---
15	75.87	75.79	75.75	75.62	75.62	75.53	---	---	---	---	---	---
20	75.89	75.73	75.74	75.61	75.60	75.50	---	---	---	---	---	---
25	75.78	75.72	75.77	75.62	75.57	75.41	---	---	---	---	---	---
EOM	75.82	75.71	75.68	75.60	75.55	---	---	---	---	---	---	---
MAX	75.89	75.83	75.82	75.71	75.63	---	---	---	---	---	---	---

CHOCTAW COUNTY

315553088273001. Local number, Cho-1.

LOCATION.--Lat 31°55'53", long 88°27'30", Hydrologic Unit 03160201, in SW¼ sec. 11, T. 11 N., R. 5 W., at dirt road 0.05 mi north of junction with county road 14 in Melvin, 9.0 mi northeast of Gilbertown, and 17.7 mi southwest of Butler.
Owner: Ernest Land.

AQUIFER.--Nanafalia Formation of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 1,780 ft, screened 1,760 to 1,780 ft.

DATUM.--Elevation of land-surface datum is 350 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--None.

REVISED RECORDS.--WDR AL-82-1: 1981.

PERIOD OF RECORD.--July 1981 to March 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 98.24 ft below land-surface datum, Feb. 11, 1985; lowest recorded, 116.67 ft below land-surface datum, Feb. 9, 1989.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 115.69 ft below land-surface datum, Oct. 2; lowest recorded, 116.67 ft below land-surface datum, Feb. 9.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	115.96	115.98	116.36	116.24	116.45	116.37	---	---	---	---	---	---
10	115.92	116.19	116.33	116.37	116.61	116.59	---	---	---	---	---	---
15	116.05	116.15	116.34	116.34	116.55	---	---	---	---	---	---	---
20	116.03	116.21	116.38	116.39	116.44	---	---	---	---	---	---	---
25	116.05	116.20	116.37	116.38	116.61	---	---	---	---	---	---	---
EOM	116.10	116.27	116.24	116.32	116.46	---	---	---	---	---	---	---
MAX	116.13	116.28	116.41	116.41	116.67	---	---	---	---	---	---	---

COLBERT COUNTY

344622087375201. Local number, Col-1.

LOCATION.--Lat 34°46'22", long 87°37'52", Hydrologic Unit 06030005, in NW¼ sec. 30, T. 3 S., R. 10 W., at Diamond Alkali Co. plant, 0.2 mi east of State Highway 133, and 2.7 mi northeast of Muscle Shoals.
Owner: U.S. Army Corps of Engineers.

AQUIFER.--Fort Payne Chert of Early Mississippian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in, depth 265 ft, casing depth unknown, open hole below casing.

DATUM.--Elevation of land-surface datum is 527.8 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--February 1953 to April 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 4.63 ft below land-surface datum, Jan. 13, 1989; lowest recorded, 40.30 ft below land-surface datum, Nov. 3, 1961.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 4.63 ft below land-surface datum, Jan. 13; lowest recorded, 19.10 ft below land-surface datum, Oct. 26.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.52	15.19	10.98	7.52	9.31	7.64	---	---	---	---	---	---
10	15.34	15.10	11.89	7.97	9.46	7.58	---	---	---	---	---	---
15	16.31	15.38	12.70	5.81	8.47	8.75	---	---	---	---	---	---
20	16.37	13.17	13.43	7.69	6.67	9.35	---	---	---	---	---	---
25	17.31	11.18	8.97	8.74	7.38	9.82	---	---	---	---	---	---
EOM	17.14	10.11	7.38	8.90	6.67	9.97	---	---	---	---	---	---
MAX	19.10	17.49	13.46	9.18	9.76	10.15	---	---	---	---	---	---

DALE COUNTY

312239085344901. Local number, Dle-1.

LOCATION.--Lat 31°22'39", long 85°34'49", Hydrologic Unit 03150201, in SW¼ sec. 30, T. 5 N., R. 25 E., at Hunt Airfield (U.S. Army), 0.6 mi west of U.S. Highway 231, and 6.5 mi southeast of Ozark.
Owner: U.S. Army.

AQUIFER.--Clayton Formation of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in, depth 453 ft, screened 433 to 453 ft.

DATUM.--Elevation of land-surface datum is 245 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.70 ft above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--October 1980 to March 1989 (discontinued).

EXTREMES OF PERIOD OF RECORD.--Highest water level recorded, 89.54 ft below land-surface datum, Mar. 17, 18, 1981; lowest recorded, 105.98 ft below land-surface datum, Sept. 2, 1988.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 103.37 ft below land-surface datum, Mar. 30; lowest recorded, 105.84 ft below land-surface datum, Oct. 7.

LOWEST WATER LEVEL FOR THE DAY, WATER YEARS OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	105.81	105.39	105.42	104.91	104.36	103.75	---	---	---	---	---	---
10	105.72	105.57	105.33	104.86	104.44	103.91	---	---	---	---	---	---
15	105.78	105.54	105.23	104.62	104.30	103.71	---	---	---	---	---	---
20	105.65	105.44	105.25	104.56	104.15	103.76	---	---	---	---	---	---
25	105.61	105.42	105.17	104.52	104.05	103.65	---	---	---	---	---	---
EOM	105.57	105.41	104.93	104.33	103.88	---	---	---	---	---	---	---
MAX	105.84	105.60	105.53	104.94	104.50	---	---	---	---	---	---	---

GREENE COUNTY

325005087532001. Local number, Gre-3.

LOCATION.--Lat 32°50'05", long 87°53'20", Hydrologic Unit 03160113, in SE¼ sec. 33, T. 22 N., R. 2 E., at Greene County warehouse on Roberts Street, Eutaw.
Owner: City of Eutaw.

AQUIFER.--Sand of Eutaw Formation of Late Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in, depth 407 ft, screened 395 to 407 ft.

DATUM.--Elevation of land-surface datum is 172.14 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.43 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby municipal wells.

PERIOD OF RECORD.--August 1952 to March 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 35.94 ft below land-surface datum, Apr. 2, 1953; lowest recorded, 51.43 ft below land-surface datum, Sept. 8, 1987.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 47.51 ft below land-surface datum, Mar. 24; lowest recorded, 50.04 ft below land-surface datum, Oct. 18, 19.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.31	49.45	48.55	48.37	48.37	47.95	---	---	---	---	---	---
10	49.31	49.17	48.59	48.38	48.27	47.85	---	---	---	---	---	---
15	49.97	48.85	48.52	48.34	48.28	47.65	---	---	---	---	---	---
20	49.79	48.74	48.57	48.24	48.46	47.64	---	---	---	---	---	---
25	49.26	48.50	48.49	48.26	48.63	---	---	---	---	---	---	---
EOM	49.16	48.51	48.37	48.45	48.17	---	---	---	---	---	---	---
MAX	50.04	49.48	48.59	48.45	48.75	---	---	---	---	---	---	---

HALE COUNTY

324205087352801. Local number, Hal-1.

LOCATION.--Lat 32°42'05", long 87°35'28", Hydrologic Unit 03160113, in SE¼ sec. 17, T. 20 N., R. 5 E., at old city waterworks lot, and about 200 ft east of State Highway 69, Greensboro.
Owner: City of Greensboro.

AQUIFER.--Sand of Eutaw Formation of Late Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in, depth 278 ft, screened 258 to 278 ft.

DATUM.--Elevation of land-surface datum is 257 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.40 ft above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--November 1961 to March 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 40.12 ft below land-surface datum, Apr. 12, 1962; lowest recorded, 67.66 ft below land-surface datum, Sept. 15, 16, 17, 18, 1988.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 64.49 ft below land-surface datum, Mar. 23, 24; lowest recorded, 67.56 ft below land-surface datum, Oct. 1.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	67.49	66.90	66.29	65.56	64.93	64.60	---	---	---	---	---	---
10	67.35	66.84	66.17	65.44	64.86	64.54	---	---	---	---	---	---
15	67.27	66.76	66.04	65.33	64.77	64.52	---	---	---	---	---	---
20	67.17	66.68	65.95	65.23	64.73	64.52	---	---	---	---	---	---
25	67.08	66.58	65.86	65.12	64.68	---	---	---	---	---	---	---
EOM	66.97	66.42	65.71	65.04	64.65	---	---	---	---	---	---	---
MAX	67.56	66.96	66.39	65.67	65.01	---	---	---	---	---	---	---

HOUSTON COUNTY

310132085024001. Local number, Hou-1

LOCATION.--Lat 31°01'32", long 85°02'40", Hydrologic Unit 03130012, in SW¼NW¼ sec. 28, T. 1 N., R. 30 E., 0.15 mi west of County Road 89, 0.8 mi north-northwest of Chattahoochee State Park, and 24.7 mi southeast of Dothan.

AQUIFER.--Ocala Limestone.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 118 ft, cased to 72 ft, open hole below.

DATUM.--Elevation of land surface datum is 130 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.80 ft above land surface datum.

REMARKS.--Water level may be affected by pumping of nearby wells.

PERIOD OF RECORD.--May 1980 to March 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 15.68 ft below land surface datum, Apr. 12, 13, 14, 1984; lowest recorded, 27.78 ft below land surface datum, Dec. 28, 29, 1981.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 25.19 ft below land surface datum, Oct. 4-10; lowest recorded, 26.90 ft below land surface datum, Mar. 17, 18, 19.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.19	25.60	25.94	26.31	26.63	26.87	---	---	---	---	---	---
10	25.20	25.67	26.00	26.37	26.68	26.86	---	---	---	---	---	---
15	25.33	25.74	26.07	26.41	26.73	26.88	---	---	---	---	---	---
20	25.40	25.80	26.14	26.46	26.76	26.89	---	---	---	---	---	---
25	25.48	25.84	26.20	26.53	26.81	26.79	---	---	---	---	---	---
EOM	25.54	25.87	26.26	26.58	26.85	---	---	---	---	---	---	---
MAX	25.54	25.87	26.26	26.58	26.85	---	---	---	---	---	---	---

JEFFERSON COUNTY

332605086523001. Local number, Jef-1.

LOCATION.--Lat 33°26'05", long 86°52'30", Hydrologic Unit 03150202, in SW¼ sec. 29, T. 18 S., R. 3 W., at County Road 42, 1.0 mi west of Oxmoor, and 2.9 mi southeast of Midfield.
Owner: City of Birmingham.

AQUIFER.--Bangor Limestone of Late Mississippian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in, depth 140 ft, cased to 68 ft open hole below.

DATUM.--Elevation of land-surface datum is 641.94 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.80 ft above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1954 to April 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 7.75 ft below land-surface datum, Apr. 14, 1980; lowest recorded, 83.04 ft below land-surface datum, Dec. 27, 28, 1954.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 13.20 ft below land-surface datum, Mar. 30; lowest recorded, 31.11 ft below land-surface datum, Nov. 3.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.44	30.48	24.23	21.84	19.82	14.84	---	---	---	---	---	---
10	29.63	29.24	24.63	21.36	19.09	15.37	---	---	---	---	---	---
15	30.11	28.75	25.27	18.46	19.00	15.63	---	---	---	---	---	---
20	30.46	28.26	25.89	18.52	19.21	16.29	---	---	---	---	---	---
25	30.79	25.53	25.35	18.77	18.35	14.98	---	---	---	---	---	---
EOM	31.02	24.32	24.45	19.30	17.63	13.96	---	---	---	---	---	---
MAX	31.02	31.11	26.08	23.11	19.83	17.09	---	---	---	---	---	---

LIMESTONE COUNTY

344819086581601. Local number, Lim-4.

LOCATION.--Lat 34°48'19", long 86°58'16", Hydrologic Unit 06030002, in SE¼ sec. 5, T. 3 S., R. 4 W., at City Hall on Bryan Street, Athens.
Owner: City of Athens.

AQUIFER.--Fort Payne Chert of Early Mississippian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in, depth 143 ft, cased to 52 ft, open hole below.

DATUM.--Elevation of land-surface datum is 711 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.50 ft above land-surface datum.

REMARKS.--Missing record Jan.13-19 and Feb. 19 through March 14.

PERIOD OF RECORD.--January 1961 to April 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 10.01 ft below land-surface datum, Mar. 21, 1980; lowest recorded, 43.09 ft below land-surface datum, Nov. 1, 1968.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 11.61 ft below land-surface datum, Jan. 13; lowest recorded, 18.98 ft below land-surface datum, Oct. 1.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.13	17.64	16.26	14.08	15.24	---	---	---	---	---	---	---
10	18.06	17.29	16.75	14.45	14.66	---	---	---	---	---	---	---
15	18.42	17.18	17.12	---	13.57	13.39	---	---	---	---	---	---
20	18.61	16.33	16.81	13.48	---	13.88	---	---	---	---	---	---
25	18.51	16.61	15.18	14.21	---	14.24	---	---	---	---	---	---
EOM	18.63	15.88	14.21	14.66	---	14.14	---	---	---	---	---	---
MAX	18.98	18.51	17.27	---	---	---	---	---	---	---	---	---

MADISON COUNTY

344127086350401. Local number, Mad-2.

LOCATION.--Lat 34°41'27", long 86°35'04", Hydrologic Unit 06030002, in NW¼ sec. 13, T. 4 S., R. 1 W., at northeast end of northeast-southwest runway at Old Huntsville airport and 3.0 mi southeast of Huntsville.
Owner: City of Huntsville.

AQUIFER.--Fort Payne Chert of Early Mississippian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in, depth 168 ft, cased to 56 ft, open hole below.

DATUM.--Elevation of land-surface datum is 613 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1953 to April 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 19.13 ft below land-surface datum, Jan. 31, 1962; lowest recorded, 44.30 ft below land-surface datum, Sept. 13, 1962.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 22.08 ft below land-surface datum, Jan. 15; lowest recorded, 34.45 ft below land-surface datum, Oct. 28.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.46	32.86	31.21	27.77	31.34	27.55	---	---	---	---	---	---
10	33.27	32.83	32.04	26.97	29.94	26.99	---	---	---	---	---	---
15	33.93	32.91	33.04	22.17	31.55	28.79	---	---	---	---	---	---
20	34.06	30.68	33.66	25.22	31.21	30.12	---	---	---	---	---	---
25	34.24	30.17	32.56	28.42	29.75	30.94	---	---	---	---	---	---
EOM	34.07	29.34	30.25	29.95	28.50	31.55	---	---	---	---	---	---
MAX	34.45	34.30	33.75	30.13	31.91	31.71	---	---	---	---	---	---

MARENGO COUNTY

323055087504101. Local number, Mag-1.

LOCATION.--Lat 32°30'55", long 87°50'41", Hydrologic Unit 03160201, in SW¼ sec. 24, T. 18 N., R. 2 E., at J. C. Webb Compress Co., Demopolis.
Owner: F.M. Culpepper.

AQUIFER.--Sand of Eutaw Formation of Late Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in, depth 900 ft, slotted 860 to 900 ft.

DATUM.--Elevation of land-surface datum is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

REMARKS.--Water levels affected by pumping of nearby wells. Records for Aug. 31 to Sept. 30, 1985, published in WDR AL-85-1, are unreliable and should not be used. Missing record from July 20 to Aug. 19.

PERIOD OF RECORD.--August 1953 to March 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.15 ft below land-surface datum, Feb. 26, 1954; lowest recorded, 26.85 ft below land-surface datum, Sept. 12, 1979.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 13.77 ft below land-surface datum, Feb. 7; lowest recorded, 25.12 ft below land-surface datum, Oct. 25.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.59	21.68	18.49	16.12	14.10	15.06	---	---	---	---	---	---
10	24.52	22.80	18.43	16.05	14.11	15.53	---	---	---	---	---	---
15	23.58	20.28	17.39	15.02	14.33	16.12	---	---	---	---	---	---
20	24.21	20.26	18.05	15.31	14.65	15.90	---	---	---	---	---	---
25	25.12	19.33	17.13	16.22	15.95	15.41	---	---	---	---	---	---
EOM	23.70	18.74	16.60	15.20	15.98	---	---	---	---	---	---	---
MAX	25.12	23.05	18.74	16.33	15.98	---	---	---	---	---	---	---

MARION COUNTY

335803087551301. Local number, Mar-1.
LOCATION.--Lat 33°58'03", long 87°55'13", Hydrologic Unit 03160103, in SE¼ sec. 32, T. 12 S., R. 13 W., at 15th Street, and 0.35 mi west of U.S. Highway 78, Guin.
Owner: M. M. Burleson.
AQUIFER.--Sandstone of Pottsville Formation of Early and Middle Pennsylvanian age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in, depth 520 ft, cased to 80 ft, open hole below.
DATUM.--Elevation of land-surface datum is 452 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above datum.
REMARKS.--None.
PERIOD OF RECORD.--March 1952 to April 1989 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.6 ft below land-surface datum, Mar. 31, 1972; lowest recorded, 11.76 ft below land-surface datum, Nov. 10, 1954.
EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 5.52 ft below land-surface datum, Mar. 30, 31; lowest recorded, 7.94 ft below land-surface datum, Oct. 13, 14.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.85	7.66	7.58	7.21	6.81	5.95	---	---	---	---	---	---
10	7.75	7.93	7.55	7.24	6.65	5.96	---	---	---	---	---	---
15	7.89	7.77	7.65	6.71	6.71	5.96	---	---	---	---	---	---
20	7.85	7.65	7.65	---	6.55	5.94	---	---	---	---	---	---
25	7.85	7.53	7.63	6.82	6.47	5.84	---	---	---	---	---	---
EOM	7.80	7.50	7.29	6.67	6.12	5.79	---	---	---	---	---	---
MAX	7.94	7.93	7.67	---	6.88	6.13	---	---	---	---	---	---

MARSHALL COUNTY

341837086294301. Local number, Mal-4.
LOCATION.--Lat 34°18'37", long 86°29'43", Hydrologic Unit 03160109, in SE¼ sec. 26, T. 8 S., R. 1 E., at U.S. Highway 231, and 0.6 mi south of Arab.
Owner: City of Arab.
AQUIFER.--Sandstone of Pottsville Formation of Early and Middle Pennsylvanian age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in, depth 362 ft, cased to 100 ft, open hole below.
DATUM.--Elevation of land-surface datum is 1,080 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.
REMARKS.--None.
PERIOD OF RECORD.--January 1962 to April 1989 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 49.50 ft below land-surface datum, May 3, 1984; lowest recorded, 78.72 ft below land-surface datum, Dec. 6, 1978.
EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 49.94 ft below land-surface datum, Mar. 5; lowest recorded, 51.73 ft below land-surface datum, Oct. 1.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.57	51.29	50.98	50.71	50.69	50.15	---	---	---	---	---	---
10	51.37	51.50	50.95	50.59	50.57	50.33	---	---	---	---	---	---
15	51.53	51.42	51.14	50.08	50.60	50.45	---	---	---	---	---	---
20	51.52	51.26	51.23	50.31	50.49	50.64	---	---	---	---	---	---
25	51.56	51.10	51.21	50.43	50.58	50.58	---	---	---	---	---	---
EOM	51.59	50.95	50.87	50.44	50.28	50.60	---	---	---	---	---	---
MAX	51.73	51.56	51.26	50.73	50.72	50.70	---	---	---	---	---	---

MONTGOMERY COUNTY

322047086214301. Local number, Mtg-3.
LOCATION.--Lat 32°20'47", long 86°21'43", Hydrologic Unit 03150201, in SE¼ sec. 21, T. 16 N., R. 17 E., at Lomax School on Hayneville Road, 0.5 mi northeast of intersection with U.S. Highway 31, and 4.5 mi southwest of Montgomery.
Owner: County of Montgomery.
AQUIFER.--Sand of Eutaw Formation of Late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in, depth 270 ft, screened 210 to 215 ft, 220 to 225 ft, 265 to 270 ft.
DATUM.--Elevation of land-surface datum is 167.2 ft. Measuring point: Top of casing, 1.00 ft above land-surface datum.
REMARKS.--Water levels affected by pumping nearby wells. No record for period June 12 to July 1.
PERIOD OF RECORD.--August 1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.9 ft below land-surface datum, Mar. 17, 1968; lowest, 31.3 ft below land-surface datum, Oct. 1, 1955.
EXTREMES FOR CURRENT YEAR.--Highest water level, 23.56 ft below land-surface datum, July 6; lowest, 30.66 ft below land-surface datum, Oct. 1.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.94	29.89	28.71	27.96	27.36	26.14	25.79	26.15	27.48	23.79	25.61	27.34
10	29.68	29.56	28.41	27.60	27.17	26.11	25.33	26.57	27.65	23.69	26.01	27.76
15	30.07	29.05	28.11	27.59	27.74	26.43	24.15	26.61	---	24.16	26.50	28.19
20	30.28	29.47	28.44	27.69	28.05	27.19	24.58	27.27	---	24.57	26.17	28.31
25	30.06	29.50	28.60	27.77	28.29	26.87	25.47	27.45	---	24.78	26.49	27.88
EOM	30.08	28.95	28.43	27.72	28.14	26.57	26.10	27.50	---	25.35	27.22	27.89
MAX	30.53	30.08	28.89	28.36	28.29	27.95	26.55	27.58	---	---	27.22	28.31

MONTGOMERY COUNTY

322040086232501. Local number, Mtg-4.
LOCATION.--Lat 32°20'40", long 86°23'25", Hydrologic Unit 03150201, in SW¼ sec. 20, T. 16 N., R. 17 E., at County Road 54, 1.0 mi southwest of intersection with U.S. Highway 31, and 6.0 mi southwest of Montgomery.
Owner: City of Montgomery.
AQUIFER.--Sand of Gordo Formation of Late Cretaceous age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in, depth 446 ft, screened 408 to 413 ft, 424 to 429 ft, 441 to 446 ft.
DATUM.--Elevation of land-surface datum is 152.8 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land-surface datum.
REMARKS.--Water levels affected by pumping of nearby wells. Records poor.
PERIOD OF RECORD.--March 1953 to March 1989 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 39.5 ft below land-surface datum, Apr. 28, 1982; lowest recorded, 148.10 ft below land-surface datum, June 24, 1988.
EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 114.68 ft below land-surface datum, Feb. 28; lowest recorded, 144.33 ft below land-surface datum, Oct. 1.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	141.72	134.68	126.07	126.84	125.74	129.82	---	---	---	---	---	---
10	141.61	132.78	126.81	127.26	126.31	124.91	---	---	---	---	---	---
15	140.07	131.43	132.25	125.96	126.22	121.95	---	---	---	---	---	---
20	140.80	130.07	126.91	121.58	119.88	121.71	---	---	---	---	---	---
25	140.94	128.71	128.76	118.66	118.28	120.49	---	---	---	---	---	---
EOM	137.57	127.21	127.73	123.77	117.00	---	---	---	---	---	---	---
MAX	144.33	136.67	132.25	128.96	126.95	---	---	---	---	---	---	---

MONTGOMERY COUNTY

322455086140501. Local number, Mtg-5.

LOCATION.--Lat 32°24'55", long 86°14'05", Hydrologic Unit 03150201, in NW¼ sec. 35, T. 17 N., R. 18 E., at Gunter Air Force Base, on U.S. Highway 231, and 4.7 mi northeast of Montgomery.
Owner: U.S. Air Force.

AQUIFER.--Sand of Gordo Formation of Late Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in, depth 232 ft, screened 215 to 232 ft.

DATUM.--Elevation of land-surface datum is 220.8 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.80 ft above land-surface datum.

REMARKS.--Missing record Jan. 24-31.

PERIOD OF RECORD.--January 1958 to March 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 82.78 ft below land-surface datum, Mar. 29, 1972; lowest recorded, 116.97 ft below land-surface datum, Sept. 16, 24, 1963.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 94.19 ft below land-surface datum, Mar. 27; lowest recorded, 97.72 ft below land-surface datum, Oct. 7.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	97.39	97.08	96.41	95.69	95.28	94.46	---	---	---	---	---	---
10	97.28	97.23	96.47	95.59	95.43	95.39	---	---	---	---	---	---
15	97.64	97.03	96.52	95.45	95.48	95.42	---	---	---	---	---	---
20	97.42	96.84	95.99	95.59	94.93	94.93	---	---	---	---	---	---
25	97.25	96.71	95.48	---	94.93	94.51	---	---	---	---	---	---
EOM	96.97	96.66	95.82	---	95.02	---	---	---	---	---	---	---
MAX	97.72	97.45	96.78	---	95.67	---	---	---	---	---	---	---

TUSCALOOSA COUNTY

331045087342501. Local number, Tus-4.

LOCATION.--Lat 33°10'45", long 87°34'25", Hydrologic Unit 03160113, in NW¼ sec. 34, T. 21 S., R. 10 W., at dirt road, 0.2 mi southeast of City Water Works Filter Plant South, and 1.0 mi southwest of Greensboro Avenue, Tuscaloosa.
Owner: City of Tuscaloosa.

AQUIFER.--Sand of Coker Formation of Late Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in, depth 73 ft, screened 67 to 73 ft.

DATUM.--Elevation of land-surface datum is 150 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to December 1984 the elevation of land-surface datum was 160 ft. Measuring point: Top of casing, 5.00 ft above land-surface datum. Prior to December 1984 measuring point was the top of the casing, 1.60 ft above land-surface datum.

REMARKS.--Water levels affected by pumping of nearby wells.

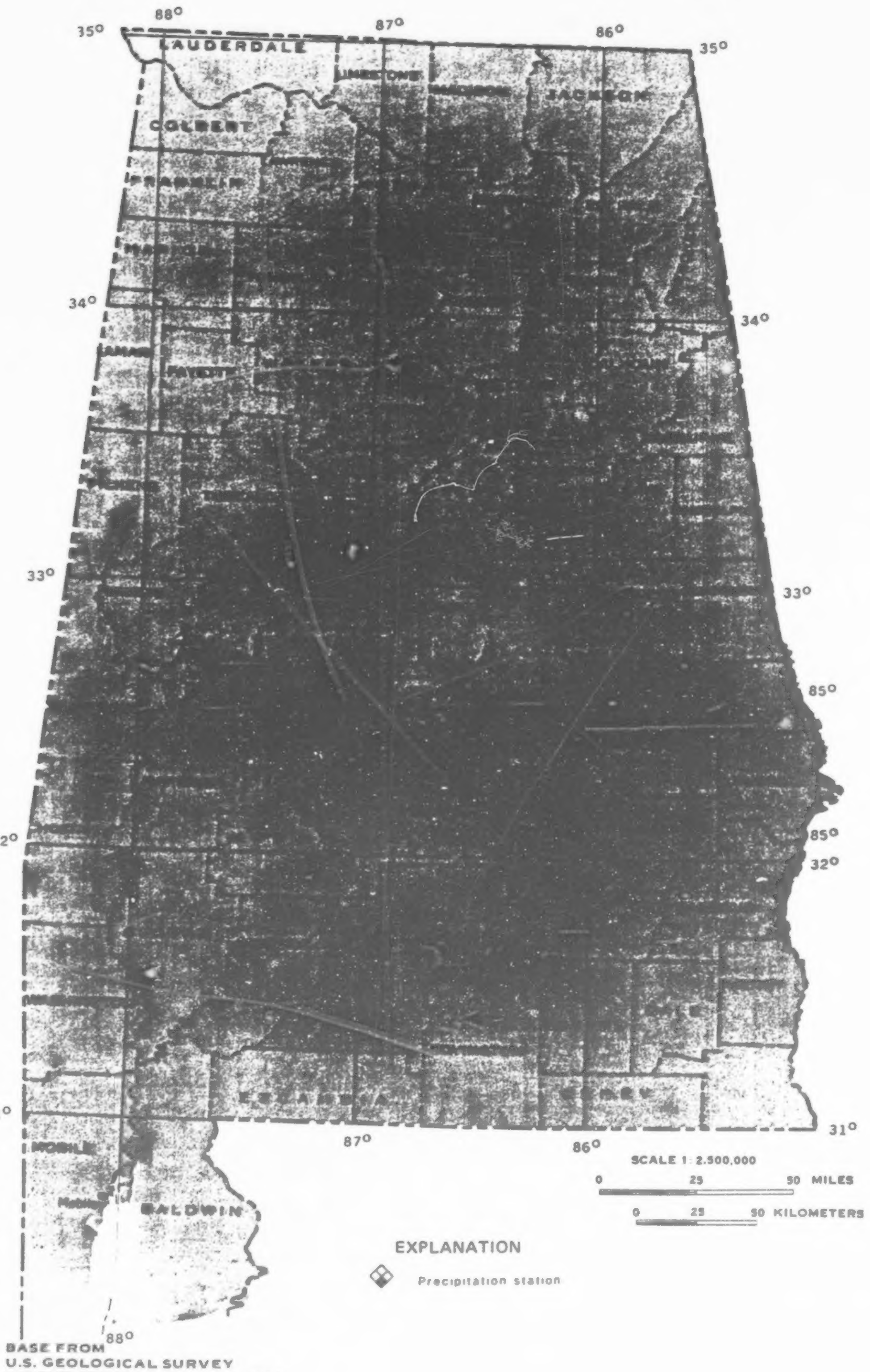
PERIOD OF RECORD.--August 1962 to March 1989 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 7.56 ft below land-surface datum, Feb. 28, 1987; lowest recorded, 35.9 ft below land-surface datum, Dec. 5, 1969.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 7.87 ft below land-surface datum, Mar. 5; lowest recorded, 9.59 ft below land-surface datum, Oct. 28, 29.

LOWEST WATER LEVEL FOR THE DAY, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.29	9.18	8.94	8.78	8.47	7.93	---	---	---	---	---	---
10	9.28	9.27	8.99	8.78	8.45	7.95	---	---	---	---	---	---
15	9.45	9.16	9.13	8.34	8.53	8.12	---	---	---	---	---	---
20	9.50	9.00	9.18	8.36	8.48	8.15	---	---	---	---	---	---
25	9.53	9.00	9.13	8.42	8.44	---	---	---	---	---	---	---
EOM	9.54	8.85	8.91	8.38	8.34	---	---	---	---	---	---	---
MAX	9.59	9.52	9.21	8.86	8.60	---	---	---	---	---	---	---


88°
87°
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35°
35°
34°
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33°
33°
85°
85°
32°
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31°
31°
87°
86°
88°
LAUDERDALE
LIMESTONE
JACKSON
COLBERT
FRANKLIN
FAYETTE
ESCAMBIA
MOBILE
Mobile
BALDWIN
SCALE 1: 2,500,000
0 25 50 MILES
0 25 50 KILOMETERS
EXPLANATION
◈ Precipitation station

BASE FROM
U.S. GEOLOGICAL SURVEY
UNITED STATES BASE MAP, 1980

Figure 8.--Location of precipitation stations.

CULLMAN COUNTY

341032086340601 PRECIPITATION STATION NEAR HOLLY POND, AL

LOCATION.--Lat 34°10'32", long 86°34'06", Hydrologic Unit 03160109, NE¼SE¼SE¼ sec. 7, T. 10 S., R. 1 E., in Cullman County.

PERIOD OF RECORD.--August 1982 to September 1989 (discontinued).

INSTRUMENTATION.--Recording precipitation gage and automatic sample collector.

REMARKS.--Daily samples are collected at 0700 a.m.

WATER-QUALITY DATA, OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	TOTAL PRECIPITATION FOR DEFINED PERIOD (IN)	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)
OCT							
01-02...	1.17	6	7	5.12	0	0	0.09
02-03...	.11	34	39	4.15	1	1	.39
18-19...	.11	18	17	5.11	2	2	.50
20-21...	.46	25	25	4.37	1	1	.18
27-28...	.41	36	37	4.14	1	1	.19
28-29...	.42	10	10	4.88	--	--	.04
OCT 31-NOV 01.	.20	30	28	4.35	--	--	.07
NOV							
04-05...	.92	12	10	4.76	0	0	.08
07-08...	.10	40	41	4.37	3	3	.74
10-11...	.10	29	26	4.75	1	1	.28
12-13...	.29	30	27	4.30	1	1	.14
16-17...	.15	20	17	4.79	1	1	.30
19-20...	1.46	10	10	4.89	0	0	.05
26-27...	1.45	9	10	5.09	0	0	.05
27-28...	.14	11	11	5.55	2	2	.49
DEC							
21-22...	.14	14	24	4.19	1	1	.14
22-23...	.90	12	12	4.59	0	0	.07
27-28...	.30	10	10	5.25	0	0	.07
29-30...	.15	32	26	4.54	1	1	.33
30-31...	.99	8	9	5.30	0	0	.04
DEC 31-JAN 01.	.90	6	6	5.85	0	0	.06
JAN							
02-03...	.06	61	61	4.15	1	1	.30
05-06...	.15	49	43	4.16	2	2	.45
07-08...	.72	16	14	4.61	0	0	.08
08-09...	.22	15	14	4.90	0	0	.09
09-10...	.82	16	14	4.28	0	0	.11
10-11...	.43	16	15	4.70	0	0	.04
11-12...	.98	13	12	4.63	0	0	.04
12-13...	2.36	9	9	5.00	0	0	.11
14-15...	.45	23	23	4.49	0	0	.11
26-27...	.40	13	16	4.84	0	0	.09
29-30...	.46	18	16	4.68	0	0	.05
FEB							
04-05...	.49	22	21	4.71	0	0	.10
05-06...	1.25	10	8	5.08	0	0	.05
06-07...	.25	19	15	4.38	0	0	.07
16-17...	.14	26	20	4.70	0	0	.10
17-18...	.06	31	28	4.21	0	0	.08
18-19...	.45	10	10	5.40	--	--	.02
19-20...	.52	12	9	4.88	0	0	.03
20-21...	1.49	8	6	5.03	0	0	.07
26-27...	.32	57	50	3.89	1	1	.21
27-28...	2.97	11	9	4.85	0	0	.04
MAR							
04-05...	1.46	14	10	4.64	1	1	.16
05-06...	1.01	20	14	4.53	1	1	.15
15-16...	.12	21	22	4.83	2	2	.67
19-20...	.19	67	69	3.80	2	2	.70
20-21...	1.70	17	15	4.33	0	0	.08
22-23...	.31	22	21	4.28	0	0	.07
23-24...	.27	13	13	4.62	--	--	.05
29-30...	1.07	8	7	5.01	0	0	.07

341032086340601 PRECIPITATION STATION NEAR HOLLY POND, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	PH LAB (STANDARD UNITS)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT									
01-02...	0.01	0.10	44	0.1	0.01	5.13	0.49	0.17	0.02
02-03...	.03	<.01	--	--	.03	4.10	3.2	.07	.04
18-19...	.09	.19	20	.1	.06	4.96	2.1	.37	.09
20-21...	.03	.07	20	0	.03	4.34	2.6	.18	.07
27-28...	.03	.10	24	.1	.06	4.12	3.4	.27	.15
28-29...	<.01	<.01	--	--	<.01	4.67	.89	.03	.09
OCT 31-NOV 01.	<.01	.02	--	--	.02	4.26	2.9	.08	<.01
NOV									
04-05...	.03	.13	44	.1	.03	4.87	1.0	.29	.06
07-08...	.31	2.3	59	.6	.21	4.38	3.4	4.5	.07
10-11...	.11	.62	52	.3	.06	4.45	3.1	.93	.02
12-13...	.07	.25	44	.1	.05	4.33	2.7	.57	.04
16-17...	.08	.34	39	.1	.06	4.73	2.2	.75	.09
19-20...	.04	.20	58	.2	.02	4.80	.79	.42	.05
26-27...	.05	.33	67	.3	.02	4.87	.79	.60	.06
27-28...	.08	.21	22	.1	.06	5.57	1.7	.43	.11
DEC									
21-22...	.06	.49	63	.3	.02	4.40	2.2	1.0	.02
22-23...	.03	.16	53	.1	.01	4.70	1.1	.27	<.01
27-28...	.04	.25	60	.2	.02	4.95	1.0	.43	<.01
29-30...	.04	.13	21	.1	.08	4.31	3.1	.18	<.01
30-31...	.01	.10	51	.1	.05	5.02	.94	.10	<.01
DEC 31-JAN 01.	.01	.02	17	0	.02	5.10	.58	<.01	<.01
JAN									
02-03...	.09	.44	42	.2	.14	3.98	5.9	1.1	.23
05-06...	.15	1.0	55	.4	.12	4.17	4.7	2.0	.16
07-08...	.07	.27	53	.2	.03	4.74	1.4	.77	.03
08-09...	.02	.06	27	0	.03	4.71	1.5	.12	<.01
09-10...	.01	.02	11	0	.02	4.54	1.4	.05	<.01
10-11...	.01	.03	28	0	.02	4.51	1.4	.08	<.01
11-12...	.02	.13	55	.1	.04	4.85	1.2	.28	.05
12-13...	.01	.06	27	0	.03	4.93	1.0	.11	.01
14-15...	.03	.16	44	.1	.03	4.38	2.3	.32	.03
26-27...	.04	.24	52	.2	.07	4.62	1.7	.39	<.01
29-30...	.02	.16	59	.2	.03	4.67	1.9	.26	<.01
FEB									
04-05...	.02	.10	39	.1	.01	4.46	2.4	.25	<.01
05-06...	.01	<.01	--	--	<.01	4.97	.83	.12	<.01
06-07...	.01	<.01	--	--	<.01	4.47	2.1	.10	<.01
16-17...	.05	.40	60	.3	.10	4.60	2.3	.76	.03
17-18...	.02	.14	46	.1	.06	4.29	2.6	.42	.02
18-19...	<.01	.01	--	--	.01	4.71	1.0	.12	.02
19-20...	.01	.04	33	0	.05	4.84	1.3	.18	<.01
20-21...	.02	.09	39	.1	.04	5.12	.74	.31	.01
26-27...	.07	.56	56	.3	.10	4.07	5.1	1.1	.04
27-28...	.01	.05	38	.1	.03	4.71	.91	.38	.01
MAR									
04-05...	.04	.28	50	.2	.04	4.94	1.2	.58	<.01
05-06...	.06	.48	59	.3	.09	4.81	1.6	.93	.02
15-16...	.10	.50	32	.2	.20	4.75	3.3	.85	.02
19-20...	.11	.52	31	.2	.29	3.91	8.0	.90	.05
20-21...	.02	.07	31	.1	.05	4.51	1.6	.25	.02
22-23...	.01	.01	8	0	.03	4.27	2.1	.19	.02
23-24...	<.01	.01	--	--	.02	4.46	1.6	.13	.02
29-30...	.02	.07	32	.1	.05	5.22	.70	.19	.01

CULLMAN

341032086340601 PRECIPITATION STATION NEAR HOLLY POND, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	BROMIDE DIS-SOLVED (MG/L AS BR)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT								
01-02...	<.010	1	0	0	0.070	0.31	0.080	0.010
02-03...	<.010	--	--	--	.460	2.0	.360	<.010
18-19...	<.010	6	.01	0	.370	1.6	.630	<.010
20-21...	<.010	5	.01	0	.300	1.3	.440	<.010
27-28...	<.010	7	.01	0	.460	2.0	.290	<.010
28-29...	<.010	--	--	--	.070	.31	.090	<.010
OCT 31-NOV 01.	<.010	--	--	--	.280	1.2	.350	<.010
NOV								
04-05...	<.010	2	0	0	.120	.53	.180	.010
07-08...	.010	15	.02	0	.740	3.3	.510	.010
10-11...	<.010	8	.01	0	.390	1.7	.540	.010
12-13...	<.010	6	.01	0	.320	1.4	.440	<.010
16-17...	<.010	5	.01	0	.190	.84	.460	<.010
19-20...	<.010	2	0	0	.090	.40	.130	<.010
26-27...	<.010	2	0	0	.070	.31	.150	<.010
27-28...	<.010	4	.01	0	.150	.66	.460	.010
DEC								
21-22...	<.010	5	.01	0	.200	.89	.210	<.010
22-23...	<.010	2	0	0	.110	.49	.160	<.010
27-28...	<.010	2	0	0	.060	.27	.170	<.010
29-30...	<.010	6	.01	0	.290	1.3	.380	<.010
30-31...	<.010	2	0	0	.070	.31	.250	<.010
DEC 31-JAN 01.	<.010	--	--	--	.050	.22	.140	<.010
JAN								
02-03...	<.010	14	.02	0	.820	3.6	1.32	.020
05-06...	.010	12	.02	0	.530	2.3	.550	.020
07-08...	<.010	4	0	0	.120	.53	.330	<.010
08-09...	<.010	3	0	0	.090	.40	.260	.020
09-10...	<.010	2	0	0	.120	.53	.150	<.010
10-11...	<.010	2	0	0	.070	.31	.110	.020
11-12...	<.010	3	0	0	.130	.58	.300	<.010
12-13...	<.010	2	0	0	.070	.31	.190	<.010
14-15...	<.010	5	.01	0	.240	1.1	.340	<.010
26-27...	<.010	4	.01	0	.180	.80	.300	<.010
29-30...	<.010	4	.01	0	.170	.75	.420	.020
FEB								
04-05...	.010	4	.01	0	.170	.75	.390	<.010
05-06...	<.010	--	--	--	.060	.27	.240	<.010
06-07...	<.010	--	--	--	.110	.49	.300	<.010
16-17...	0.010	6	.01	0	.300	1.3	.580	<.010
17-18...	<.010	6	.01	0	.420	1.9	.330	.010
18-19...	<.010	--	--	--	.080	.35	.100	<.010
19-20...	<.010	2	0	0	.080	.35	.240	<.010
20-21...	<.010	7	.01	0	.070	.31	.120	1.61
26-27...	.010	11	.01	0	.670	3.0	.670	<.010
27-28...	<.010	2	0	0	.110	.49	.120	<.010
MAR								
04-05...	<.010	3	0	0	.080	.35	.180	<.010
05-06...	<.010	4	.01	0	.130	.58	.270	<.010
15-16...	.010	8	.01	0	.400	1.8	.650	.020
19-20...	.010	15	.02	0	.890	3.9	1.24	.030
20-21...	<.010	3	0	0	.150	.66	.200	<.010
22-23...	<.010	4	0	0	.230	1.0	.100	<.010
23-24...	<.010	--	--	--	.070	.31	.080	<.010
29-30...	<.010	2	0	0	.100	.44	.190	<.010

CULLMAN

341032086340601 PRECIPITATION STATION NEAR HOLLY POND, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	TOTAL PRECIPITATION FOR DEFINED PERIOD (IN)	SPECIFIC CONDUCTANCE (US/CM)	SPECIFIC CONDUCTANCE LAB (US/CM)	PH (STANDARD UNITS)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)
APR							
03-04...	0.76	13	9	4.62	0	0	0.08
04-05...	2.19	18	7	4.80	0	0	.12
06-07...	.17	37	28	4.27	1	1	.43
08-09...	.25	51	39	4.07	2	2	.80
09-10...	.60	27	21	4.36	1	1	.27
14-15...	.24	46	35	4.01	1	1	.18
APR 30- MAY 01.	1.00	32	26	4.01	0	0	.16
MAY							
04-05...	.50	52	44	3.83	1	1	.25
05-06...	1.49	9	9	4.52	0	0	.02
08-09...	.05	63	53	3.82	2	2	.50
09-10...	.28	13	8	4.56	0	0	.10
14-15...	.37	8	6	4.84	0	0	.11
20-21...	.25	28	22	4.40	1	1	.34
22-23...	1.06	8	7	4.60	0	0	.05
JUN							
02-03...	.26	26	11	4.35	0	0	.10
03-04...	.25	19	13	4.60	0	0	.04
04-05...	.23	15	17	4.59	0	0	.02
05-06...	.34	13	22	4.86	0	0	.07
08-09...	.48	10	9	4.76	0	0	.03
12-13...	1.03	15	14	4.47	0	0	.15
13-14...	.06	--	31	4.15	1	1	.30
14-15...	1.48	13	9	4.81	1	1	.17
15-16...	.62	17	16	4.41	0	0	.03
18-19...	1.97	12	9	4.57	0	0	.11
19-20...	.29	34	29	4.06	0	0	.10
20-21...	1.17	29	28	4.16	0	0	.03
21-22...	.32	44	41	3.99	0	0	.12
22-23...	.22	46	41	3.98	0	0	.13
27-28...	.86	38	34	4.15	0	0	.05
JUN 30-JUL 01.	.31	84	75	3.72	0	0	.07
JUL							
01-02...	1.27	8	7	4.96	0	0	.09
02-03...	1.49	6	5	5.12	0	0	.04
05-06...	.27	14	12	4.65	0	0	.03
06-07...	.29	48	43	3.91	0	0	.09
09-10...	.34	58	53	3.86	0	0	.13
11-12...	.36	19	20	4.36	0	0	.08
12-13...	.31	12	11	4.70	1	1	.16
13-14...	.37	16	14	4.58	0	0	.09
16-17...	2.42	15	15	4.56	0	0	.06
19-20...	.32	19	15	4.45	0	0	.10
24-25...	.07	21	18	4.56	0	0	.13
28-29...	.05	45	30	4.07	2	2	.52
29-30...	.39	46	30	4.05	2	2	.59
AUG							
02-03...	.62	8	7	5.64	1	1	.22
06-07...	1.05	14	7	4.56	0	0	.11
15-16...	.07	16	17	5.09	1	1	.23
24-25...	.37	12	11	4.54	1	1	.30
29-30...	.54	79	79	3.56	1	1	.19
30-31...	.99	16	11	4.29	0	0	.04
SEP							
01-02...	.30	18	11	4.51	0	0	.07
03-04...	.36	66	52	3.69	0	0	.06
09-10...	.97	54	41	3.61	0	0	.12
10-11...	.25	26	19	4.78	2	2	.28
14-15...	.36	29	20	4.02	0	0	.07
21-22...	.57	13	10	4.57	0	0	.07
24-25...	.03	24	20	4.08	0	0	.07
25-26...	.35	7	6	5.90	0	0	.03
28-29...	1.90	9	9	4.62	0	0	.02
29-30...	1.57	11	10	4.90	0	0	.03
SEP 30-OCT 01.	.57	15	13	4.64	0	0	.05

CULLMAN

341032086340601 PRECIPITATION STATION NEAR HOLLY POND, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	PH LAB (STANDARD UNITS)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR									
03-04...	0.03	0.17	49	0.1	0.05	4.97	1.3	0.38	0.01
04-05...	.02	.11	36	.1	.04	5.32	.89	.31	.02
06-07...	.05	.05	7	0	.14	4.37	3.2	.34	.03
08-09...	.11	.47	28	.1	.18	4.34	6.0	.91	.05
09-10...	.09	.60	53	.3	.10	4.56	2.5	1.2	.02
14-15...	.03	.07	19	0	.06	4.13	4.2	.31	.02
APR 30-MAY 01.	.03	.03	10	0	.06	4.35	3.1	.31	.03
MAY									
04-05...	.03	.13	23	.1	.15	4.06	4.5	.31	.02
05-06...	.01	.09	54	.1	.06	4.82	.82	.10	.02
08-09...	.08	.35	28	.1	.30	4.08	6.3	.64	.05
09-10...	.02	.22	56	.2	.04	5.23	1.3	.25	.03
14-15...	.02	.02	10	0	.03	5.25	.79	.14	.02
20-21...	.06	.25	31	.1	.07	4.48	2.6	.45	.09
22-23...	.02	.10	47	.1	.03	5.02	.77	.17	.06
JUN									
02-03...	.03	.24	57	.2	.02	5.10	.90	.37	.01
03-04...	.02	.12	54	.1	.03	4.88	1.7	.23	.02
04-05...	.01	.03	--	0	<.01	4.53	1.7	.10	.02
05-06...	.04	.20	53	.2	.04	4.64	2.4	.39	.04
08-09...	.01	.03	34	0	.01	4.89	.93	.09	.02
12-13...	.04	.19	41	.1	.04	4.81	1.4	.28	.02
13-14...	.10	.62	49	.3	.17	4.42	3.2	1.1	.02
14-15...	.04	.23	44	.1	.04	5.10	1.5	.35	.02
15-16...	.01	.07	54	.1	.01	4.50	1.8	.13	.02
18-19...	.03	.14	42	.1	.02	4.88	1.1	.23	.02
19-20...	.02	.04	19	0	.03	4.27	2.9	.13	.02
20-21...	.01	.02	24	0	.02	4.27	2.8	.06	.03
21-22...	.03	.08	26	.1	.06	4.16	3.2	.24	.02
22-23...	.04	.07	21	0	.06	4.20	4.5	.33	.03
27-28...	.01	.03	25	0	.02	4.18	3.4	.10	.02
JUN 30-JUL 01.	.01	.06	33	.1	.04	3.80	7.5	.26	.04
JUL									
01-02...	.03	.14	42	.1	.06	6.06	.65	.24	.01
05-06...	.01	.02	25	0	.01	4.71	1.2	.05	.01
06-07...	.03	.10	35	.1	.04	4.15	5.0	.25	.03
09-10...	.02	.02	8	0	.06	4.10	7.5	.13	.02
11-12...	.02	.11	42	.1	.04	4.71	1.4	.18	.02
12-13...	.04	.12	29	.1	.05	5.71	.97	.18	.01
13-14...	.02	.08	34	.1	.03	5.00	1.4	.14	.02
16-17...	.02	.05	27	0	.05	4.80	1.7	.12	.02
19-20...	.02	.09	35	.1	.02	4.70	1.6	.15	.02
24-25...	.05	.24	47	.1	.05	4.73	1.9	.36	.02
28-29...	.05	.12	12	0	.33	4.33	4.9	.47	.03
29-30...	.04	.03	4	0	.05	4.31	5.0	.20	.02
AUG									
02-03...	.05	.29	42	.2	.08	6.27	1.1	.45	.01
06-07...	.02	.09	34	.1	.02	5.16	.93	.11	.01
15-16...	.04	.04	9	0	.08	5.16	3.1	.19	.02
24-25...	.05	.09	16	0	.06	5.45	1.2	.13	.02
29-30...	.04	.05	13	0	.09	3.86	7.9	.36	.08
30-31...	.01	.02	22	0	.01	4.78	.87	.05	.01
SEP									
01-02...	.01	.03	19	0	.05	4.93	1.5	.09	.02
03-04...	.01	.02	16	0	.03	3.94	7.0	.13	.02
09-10...	.03	.05	18	0	.06	4.06	4.8	.15	.04
10-11...	.26	.10	3	0	4.9	6.53	3.2	3.5	.28
14-15...	.03	.06	21	0	.14	4.46	2.7	.13	.02
21-22...	.04	.35	67	.3	.03	4.95	1.1	.50	.02
24-25...	.02	.04	17	0	.12	4.58	2.7	.17	.03
25-26...	.01	.01	13	0	.02	6.31	.98	.05	.01
28-29...	.01	.01	--	0	<.01	4.74	.87	.05	.01
29-30...	.01	.04	--	0	<.01	4.75	.93	.10	.01
SEP 30-OCT 01.	.01	.05	--	.1	<.01	4.63	1.3	.11	.05

PRECIPITATION-QUALITY DATA

CULLMAN

341032086340601 PRECIPITATION STATION NEAR HOLLY POND, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	BROMIDE DIS-SOLVED (MG/L AS BR)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
APR								
03-04...	<.010	3	0	0	0.130	0.58	0.270	<.010
04-05...	<.010	2	0	0	.130	.58	.220	<.010
06-07...	<.010	9	.01	0	.820	3.6	.670	<.010
08-09...	.010	14	.02	0	.910	4.0	1.32	.020
09-10...	.010	7	.01	0	.290	1.3	.380	<.010
14-15...	<.010	7	.01	0	.440	1.9	.450	<.010
APR 30-MAY 01.	<.010	6	.01	0	.400	1.8	.500	.090
MAY								
04-05...	<.010	9	.01	0	.680	3.0	.530	<.010
05-06...	<.010	2	0	0	.110	.49	.130	<.010
08-09...	.010	14	.02	0	.970	4.3	1.16	.020
09-10...	<.010	3	0	0	.190	.84	.420	<.010
14-15...	<.010	2	0	0	.140	.62	.220	<.010
20-21...	<.010	7	.01	0	.450	2.0	.540	<.010
22-23...	<.010	2	0	0	.090	.40	.170	<.010
JUN								
02-03...	<.010	3	0	0	.250	1.1	.320	<.010
03-04...	<.010	4	0	0	.200	.89	.480	<.010
04-05...	<.010	3	0	0	.150	.66	.170	<.010
05-06...	<.010	5	.01	0	.290	1.3	.570	<.010
08-09...	<.010	2	0	0	.140	.62	.210	<.010
12-13...	<.010	4	0	0	.250	1.1	.280	<.010
13-14...	<.010	8	.01	0	.500	2.2	.440	<.010
14-15...	<.010	4	0	0	.200	.89	.370	<.010
15-16...	<.010	3	0	0	.160	.71	.200	<.010
18-19...	<.010	3	0	0	.160	.71	.180	<.010
19-20...	<.010	6	.01	0	.500	2.2	.440	<.010
20-21...	<.010	4	.01	0	.260	1.2	.250	<.010
21-22...	<.010	8	.01	0	.760	3.4	.490	<.010
22-23...	.010	9	.01	0	.610	2.7	.850	<.010
27-28...	<.010	5	.01	0	.300	1.3	.180	<.010
JUN 30-JUL 01.	.010	13	.02	0	1.01	4.5	.750	<.010
JUL								
01-02...	<.010	2	0	0	.120	.53	.410	.030
02-03...	<.010	1	0	0	.060	.27	.120	<.010
05-06...	<.010	2	0	0	.140	.62	.180	<.010
06-07...	<.010	9	.01	0	.640	2.8	.750	<.010
09-10...	<.010	12	.02	0	.550	2.4	1.35	<.010
11-12...	<.010	6	.01	0	.370	1.6	.420	<.010
12-13...	<.010	3	0	0	.180	.80	.360	<.010
13-14...	<.010	4	.01	0	.320	1.4	.530	<.010
16-17...	<.010	3	0	0	.150	.66	.380	<.010
19-20...	<.010	3	0	0	.190	.84	.220	<.010
24-25...	<.010	5	.01	0	.320	1.4	.480	<.010
28-29...	.010	10	.01	0	.570	2.5	.850	<.010
29-30...	<.010	10	.01	0	.610	2.7	.850	<.010
AUG								
02-03...	<.010	4	0	0	.160	.71	.550	<.010
06-07...	<.010	3	0	0	.200	.89	.300	<.010
15-16...	<.010	7	.01	0	.330	1.5	1.10	<.010
24-25...	<.010	3	0	0	.210	.93	.300	<.010
29-30...	.010	12	.02	0	.570	2.5	.530	.020
30-31...	<.010	3	0	0	.280	1.2	.290	<.010
SEP								
01-02...	<.010	3	0	0	.230	1.0	.500	<.010
03-04...	<.010	11	.01	0	.580	2.6	.800	<.010
09-10...	<.010	8	.01	0	.460	2.0	.310	<.010
10-11...	<.010	17	.02	0	.500	2.2	.900	.270
14-15...	<.010	5	.01	0	.310	1.4	.500	<.010
21-22...	<.010	3	0	0	.200	.89	.300	<.010
24-25...	<.010	5	.01	0	.270	1.2	.360	<.010
25-26...	<.010	2	0	0	.120	.53	.620	<.010
28-29...	<.010	1	0	0	.070	.31	.030	<.010
29-30...	<.010	2	0	0	.080	.35	.040	<.010
SEP 30-OCT 01.	<.010	2	0	0	.090	.40	.070	<.010

1/ Beginning is date bucket placed in the collector; ending is date bucket and sample were removed.

PRECIPITATION-QUALITY DATA

DALLAS COUNTY

322710087140401 PRECIPITATION STATION NEAR MARION JUNCTION, AL

LOCATION.--Lat 32°27'10", long 87°14'04", Hydrologic Unit 03150203, NE¼SE¼SW¼ sec 11, T. 17 N., R. 8 E., in Dallas County.

PERIOD OF RECORD.--August 1983 to current year.

REMARKS.--Weekly samples are collected on Tuesday at 0700 a.m.

WATER-QUALITY DATA, OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	TOTAL PRECIP-ITATION FOR DEFINED PERIOD (IN)	SPEC. CONDUC-TANCE FIELD ATM DEP WET TOT (US/CM)	SPEC. CONDUC-TANCE LAB ATM DEP WET TOT (US/CM)	PH FIELD ATM DEP WET T (UNITS)	PH LAB ATM DEP WET T (UNITS)	CALCIUM ATM DEP WET DIS (MG/L)	MAG-NESIUM ATM DEP WET DIS (MG/L)
OCT							
18-25...	1.60	--	16.6	4.32	4.54	0.075	0.012
OCT 25-NOV 01.	.85	32.9	34.2	4.07	4.15	.081	.021
NOV							
01-08...	1.10	10.0	10.1	4.57	4.83	.170	.037
08-15...	1.30	21.8	24.4	4.36	4.39	.154	.064
15-22...	1.30	13.5	13.6	--	4.71	.100	.069
22-29...	.23	28.6	27.1	--	4.99	.573	.267
DEC							
06-12...	.50	40.4	37.1	4.12	4.14	.277	.021
12-20...	.38	39.6	37.1	4.18	4.16	.230	.053
20-27...	.35	21.4	18.3	4.51	4.61	.190	.088
DEC 27-JAN 03.	2.80	17.8	10.3	4.65	4.76	.050	.023
JAN							
03-10...	.25	47.2	40.8	4.24	4.19	.250	.104
10-17...	1.25	27.1	28.2	4.27	4.29	.109	.079
17-24...	.40	--	11.2	--	6.62	1.03	.073
24-31...	.75	12.1	12.2	4.55	4.72	.080	.030
FEB							
13-21...	.65	39.3	36.8	4.11	4.18	.200	.080
21-28...	.65	11.7	11.0	4.62	4.83	.070	.056
FEB 28-MAR 07.	--	12.8	13.7	4.60	4.75	.170	.076
MAR							
14-21...	.85	11.9	8.8	4.62	5.26	.160	.037
21-28...	1.00	16.4	16.6	4.37	4.48	.050	.012
MAR 28-APR 04.	1.65	10.2	10.7	4.59	4.77	.060	.024
APR							
04-11...	5.20	14.5	16.0	4.38	4.59	.184	.035
11-18...	.05	51.4	36.6	4.06	4.33	.290	.073
18-25...	0	--	1.7	--	6.07	.110	.004
APR 25-MAY 02.	.60	15.9	15.6	4.38	4.75	.170	.021
MAY							
02-09...	.10	50.4	43.1	4.02	4.21	.750	.089
09-16...	.45	16.5	15.4	4.28	4.71	.160	.033
16-23...	.50	28.7	27.1	--	4.46	.400	.088
23-30...	.04	44.6	49.5	--	6.82	1.19	.298
MAY 30-JUN 06.	.90	9.2	7.6	--	5.41	.080	.025
JUN							
06-13...	1.00	9.0	8.6	--	5.85	.100	.034
13-20...	2.65	10.3	11.4	--	4.87	.150	.037
20-27...	--	--	14.7	--	4.57	.050	.015
JUN 27-JUL 04.	2.50	--	10.3	4.48	4.74	.080	.021
JUL							
04-11...	1.70	--	19.3	4.15	4.41	.070	.013
11-18...	1.50	12.4	12.6	4.75	4.69	.110	.022
18-25...	1.00	9.5	8.8	4.81	4.88	.050	.015
JUL 25-AUG 01.	.04	--	70.1	--	3.91	.190	.053
AUG							
01-08...	1.00	26.0	28.5	--	4.30	.320	.074
08-15...	.01	--	18.7	--	5.51	.600	.071
SEP							
05-12...	.45	--	11.1	4.62	4.86	.100	.013
12-19...	.20	--	28.7	--	4.48	.165	.038
19-26...	.75	12.7	12.2	4.92	4.65	.027	.005
SEP 26-OCT 03.	.80	--	16.5	4.65	4.54	.045	.025

DALLAS COUNTY

322710087140401 PRECIPITATION STATION NEAR MARION JUNCTION, AL--Continued

WATER-QUALITY DATA, OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	SODIUM ATM DEP WET DIS (MG/L)	POTAS-SIUM ATM DEP WET DIS (MG/L)	SULFATE ATM DEP WET DIS AS SO4 (MG/L)	CHLO-RIDE ATM DEP WET DIS (MG/L)	NI-TROGEN NITRATE ATM DEP WET DIS AS NO3 (MG/L)	NI-TROGEN AMMON. ATM DEP WET DIS AS NH4 (MG/L)	PHOS-PHOROUS ORTHO ATM DEP WET DIS AS PO4 (MG/L)
OCT							
18-25...	0.080	0.004	1.75	0.15	1.00	<.020	<.020
OCT 25-NOV 01.	.142	.026	3.61	.26	1.70	.250	<.020
NOV							
01-08...	.262	.019	1.03	.45	.60	.110	<.020
08-15...	.472	.038	2.49	.73	1.22	.250	<.020
15-22...	.535	.039	1.43	.95	.55	.080	<.020
22-29...	2.14	.129	3.22	3.64	1.26	.230	<.020
DEC							
06-12...	.063	.017	4.30	.26	1.95	.270	<.020
12-20...	.302	.022	3.69	.63	2.29	.300	<.020
20-27...	.735	.088	1.78	1.23	1.15	.080	<.020
DEC 27-JAN 03.	.172	.018	1.02	.31	.44	.100	<.020
JAN							
03-10...	.694	.082	5.28	1.16	1.62	.290	<.020
10-17...	.578	.048	2.63	.94	1.37	.230	<.020
17-24...	.214	.079	1.25	.22	1.24	.310	<.020
24-31...	.216	.026	1.40	.38	.65	<.020	<.020
FEB							
13-21...	.574	.060	4.14	.95	2.09	.490	<.020
21-28...	.479	.022	.95	.81	.41	<.020	<.020
FEB 28-MAR 07.	.590	.037	1.40	1.08	.58	.030	<.020
MAR							
14-21...	.237	.221	1.21	.38	.29	<.020	<.020
21-28...	.066	.025	1.81	.11	.95	.070	<.020
MAR 28-APR 04.	.169	.032	1.11	.29	.46	.070	<.020
APR							
04-11...	.183	.036	1.89	.30	1.02	.170	<.020
11-18...	.654	.140	5.31	.68	3.34	.770	<.020
18-25...	.048	<.003	.04	.04	<.03	<.020	<.020
APR 25-MAY 02.	.125	.052	2.07	.18	1.48	.530	<.020
MAY							
02-09...	.424	.075	4.99	.53	4.76	.630	<.020
09-16...	.205	.033	1.88	.27	1.16	.330	<.020
16-23...	.474	.090	2.93	.81	2.42	.480	<.020
23-30...	2.97	.507	5.89	3.57	4.48	.130	.560
MAY 30-JUN 06.	.164	.117	.79	.27	<.03	<.020	<.020
JUN							
06-13...	.243	.113	1.23	.41	.78	.630	<.020
13-20...	.195	.023	1.19	.33	.73	.180	<.020
20-27...	.079	.016	1.32	.14	.78	.180	<.020
JUN 27-JUL 04.	.108	.018	.90	.20	.47	.070	<.020
JUL							
04-11...	.041	.015	1.69	.09	.81	.100	<.020
11-18...	.109	.022	1.14	.15	.90	.130	<.020
18-25...	.143	.026	.66	.24	.72	.080	<.020
JUL 25-AUG 01	.112	.036	7.21	.37	5.10	.570	.120
AUG							
01-08...	.363	.040	3.00	.59	1.35	.090	<.020
08-15...	.126	.032	3.36	.38	2.38	.060	.350
SEP							
05-12...	.134	.013	1.32	.26	.88	.210	<.020
12-19...	.164	.071	4.17	.23	2.38	.410	<.020
19-26...	.057	.008	1.16	.09	.53	.110	<.020
SEP 26-OCT 03.	.207	.020	1.33	.33	.80	.120	<.020

1/ Beginning is date bucket placed in the collector; ending is date bucket and sample were removed.

MONROE COUNTY

311625087390701 PRECIPITATION STATION NEAR URIAH, AL

LOCATION.--Lat 31°16'25", long 87°39'07", Hydrologic Unit 03150204, NW¼NE¼NE¼ sec. 34, T. 4 N., R. 4 E., in Monroe County.

PERIOD OF RECORD.--October 1982 to September 1989 (discontinued).

INSTRUMENTATION.--Recording precipitation gage and automatic sample collector.

REMARKS.--Daily samples are collected at 0700 a.m.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	TOTAL PRECIP-ITATION FOR DEFINED PERIOD (IN)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT							
01-02...	0.35	19	19	4.44	0	0	0.06
02-03...	1.70	26	--	5.82	8	8	2.9
21-22...	.15	26	32	4.31	1	1	.15
NOV							
04-05...	.40	25	17	4.61	1	1	.14
12-13...	.65	21	11	4.89	0	0	.06
16-17...	.88	11	8	5.70	0	0	.04
19-20...	1.75	15	7	5.71	0	0	.03
26-27...	.96	28	29	4.79	2	2	.24
27-28...	.24	25	--	4.36	3	3	.51
DEC							
10-11...	.65	2	6	4.94	--	--	.02
15-16...	.10	70	70	3.88	1	1	.12
27-28...	.10	36	32	4.41	1	1	.15
30-31...	.30	22	19	4.59	1	1	.12
JAN							
14-15...	.40	13	12	5.30	0	0	.08
19-20...	.50	16	13	4.55	0	0	.05
20-21...	.08	11	9	4.66	0	0	.09
30-31...	.20	11	9	4.79	0	0	.07
FEB							
17-18...	.20	--	75	3.81	2	2	.28
18-19...	.30	33	26	4.24	0	0	.12
20-21...	2.40	13	10	4.83	0	0	.09
27-28...	.10	27	22	4.66	2	2	.30
MAR							
01-02...	.15	50	41	4.17	2	2	.42
02-03...	1.70	8	5	4.95	0	0	.04
05-06...	.40	16	15	4.88	1	1	.12
15-16...	.60	31	26	4.57	1	1	.11
20-21...	.30	25	28	4.36	1	1	.26
21-22...	.20	22	18	4.44	0	0	.13
22-23...	1.30	15	11	4.67	0	0	.07
29-30...	1.40	15	9	4.81	1	1	.10
APR							
04-05...	2.00	17	10	4.63	0	0	.11
09-10...	.60	27	21	4.36	1	1	.27
10-11...	.20	24	20	4.34	2	2	.64
19-20...	.80	21	15	4.39	0	0	.03
28-29...	1.00	25	26	4.25	0	0	.07
29-30...	.90	25	22	4.31	0	0	.07
APR 30-MAY 01.	1.30	13	10	4.61	0	0	.03
MAY							
01-02...	.40	2	2	5.43	--	--	<.01
10-11...	.11	23	35	4.38	2	2	.65
13-14...	.09	30	40	4.10	1	1	.31
14-15...	.14	13	22	4.51	2	2	.52
18-19...	.90	13	19	4.35	0	0	.14
19-20...	.09	22	22	4.70	2	2	.40
20-21...	1.50	19	13	4.68	0	0	.10
21-22...	.20	22	24	4.54	1	1	.28
22-23...	.10	24	25	4.93	1	1	.39
23-24...	1.50	10	9	4.96	0	0	.10

MONROE COUNTY

311625087390701 PRECIPITATION STATION NEAR URIAH, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	PH LAB (STANDARD UNITS)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT									
01-02...	0.07	0.30	58	0.2	0.02	4.47	1.5	0.54	0.03
02-03...	.12	1.5	24	.2	2.1	6.65	3.4	1.6	.05
21-22...	.07	.38	53	.2	.06	4.23	2.6	.83	.06
NOV									
04-05...	.07	.99	65	.6	.39	4.89	1.2	1.5	.15
12-13...	.04	.26	62	.2	.02	4.80	.84	.45	.01
16-17...	.04	.30	69	.3	.02	4.87	.65	.52	<.01
19-20...	.04	.41	77	.4	.02	4.97	.50	.73	<.01
26-27...	.24	2.0	72	.7	.08	4.55	2.1	4.1	.05
27-28...	.34	2.7	68	.7	.15	4.27	4.3	5.9	.15
DEC									
10-11...	<.01	.04	--	--	.03	4.88	.50	<.01	.04
15-16...	.08	.68	67	.4	.08	3.86	5.2	1.5	<.01
27-28...	.23	1.8	74	.7	.09	4.43	2.5	3.5	.01
30-31...	.10	.88	71	.5	.06	4.59	1.5	1.6	.01
JAN									
14-15...	.06	.45	67	.3	.03	4.85	.72	.96	.02
19-20...	.01	.04	31	0	.02	4.54	1.2	.07	.01
20-21...	.01	.05	25	0	.05	4.77	.79	.11	.03
30-31...	.04	.28	63	.2	.01	4.88	.74	.56	.01
FEB									
17-18...	.21	2.0	71	.7	.14	3.87	7.3	3.6	.05
18-19...	.04	.34	58	.2	.06	4.32	3.0	.69	.03
20-21...	.04	.35	63	.3	.04	4.88	.96	.66	.01
27-28...	.20	1.7	69	.6	.09	4.78	1.8	2.5	.03
MAR									
01-02...	.21	2.0	67	.6	.17	4.25	3.7	2.6	.04
02-03...	.01	.04	34	0	.02	5.07	.54	.19	.01
05-06...	.16	1.5	76	.7	.09	5.08	.90	2.3	<.01
15-16...	.08	.64	67	.4	.07	4.38	2.4	1.4	.02
20-21...	.10	.68	56	.3	.09	4.36	2.6	1.5	.04
21-22...	.04	.26	49	.2	.07	4.51	1.8	.56	.03
22-23...	.03	.21	58	.2	.03	4.68	.95	.46	<.01
29-30...	.08	.61	67	.4	.06	5.23	.88	1.2	.02
APR									
04-05...	.04	.29	55	.2	.06	4.95	1.2	.63	.01
09-10...	.09	.60	53	.3	.10	4.56	2.5	1.2	.02
10-11...	.06	.23	20	.1	.13	4.62	3.1	.57	.01
19-20...	.01	.01	13	0	.02	4.44	1.7	.20	.02
28-29...	.03	.20	52	.2	.08	4.31	2.8	.55	.03
29-30...	.04	.25	55	.2	.08	4.39	2.5	.43	.02
APR 30-MAY 01.	.01	.05	43	.1	.02	4.69	.97	.13	.01
MAY									
01-02...	<.01	.01	--	--	.01	5.36	.07	.07	.02
10-11...	.16	.71	34	.2	.52	4.50	4.2	1.7	.07
13-14...	.05	.27	32	.1	.20	4.14	4.7	.75	.06
14-15...	.07	.24	23	.1	.09	4.44	2.2	.44	.02
18-19...	.03	.13	35	.1	.04	4.37	1.8	.31	.03
19-20...	.16	.75	47	.3	.15	4.55	2.1	2.0	.07
20-21...	.04	.28	55	.2	.07	4.64	1.3	.49	.05
21-22...	.09	.54	49	.2	.12	4.42	2.4	.96	.06
22-23...	.08	.47	42	.2	.09	4.36	2.6	.74	.07
23-24...	.04	.22	51	.2	.04	5.10	.90	.33	.02

PRECIPITATION-QUALITY DATA

MONROE COUNTY

311625087390701 PRECIPITATION STATION NEAR URIAH, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	BROMIDE DIS-SOLVED (MG/L AS BR)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT								
01-02...	<.010	3	0	0	0.160	0.71	0.090	<.010
02-03...	.010	17	.02	0	.060	.27	3.64	0.260
21-22...	<.010	7	.01	0	.440	1.9	.350	<.010
NOV								
04-05...	<.010	5	.01	0	.140	.62	.180	0.010
12-13...	<.010	2	0	0	.110	.49	.110	0.010
16-17...	<.010	2	0	0	.060	.27	.070	0.010
19-20...	<.010	2	0	0	.040	.18	.030	0.010
26-27...	<.010	10	.01	0	.150	.66	.300	0.010
27-28...	<.010	16	.02	0	.290	1.3	.500	<.010
DEC								
10-11...	<.010	--	--	--	.050	.22	.060	<.010
15-16...	<.010	14	.02	0	1.16	5.1	.630	<.010
27-28...	.010	9	.01	0	.160	.71	.180	<.010
30-31...	<.010	5	.01	0	.120	.53	.150	<.010
JAN								
14-15...	<.010	3	0	0	.090	.40	.080	0.010
19-20...	<.010	2	0	0	.110	.49	.050	<.010
20-21...	<.010	2	0	0	.090	.40	.050	<.010
30-31...	<.010	2	0	0	.080	.35	.080	0.020
FEB								
17-18...	.020	17	.02	0	.720	3.2	.490	<.010
18-19...	<.010	5	.01	0	.180	.80	.290	<.010
20-21...	<.010	3	0	0	.070	.31	.100	<.010
27-28...	.010	8	.01	0	.160	.71	.150	<.010
MAR								
01-02...	.010	12	.02	0	.470	2.1	.290	<.010
02-03...	<.010	1	0	0	.050	.22	.070	<.010
05-06...	.010	6	.01	0	.070	.31	.100	<.010
15-16...	<.010	6	.01	0	.190	.84	.210	<.010
20-21...	.010	7	.01	0	.310	1.4	.250	<.010
21-22...	<.010	4	.01	0	.210	.93	.250	<.010
22-23...	<.010	2	0	0	.140	.62	.090	<.010
29-30...	.010	4	0	0	.100	.44	.170	<.010
APR								
04-05...	<.010	3	0	0	.190	.84	.250	<.010
09-10...	.010	7	.01	0	.290	1.3	.380	<.010
10-11...	.010	7	.01	0	.360	1.6	.460	<.010
19-20...	<.010	3	0	0	.130	.58	.180	<.010
28-29...	<.010	6	.01	0	.310	1.4	.370	<.010
29-30...	<.010	5	.01	0	.280	1.2	.330	<.010
APR 30-MAY 01.	<.010	2	0	0	.120	.53	.070	<.010
MAY								
01-02...	<.010	--	--	--	.020	.09	<.010	<.010
10-11...	<.010	12	.02	0	.690	3.1	.710	<.010
13-14...	.010	8	.01	0	.380	1.7	.350	<.010
14-15...	<.010	6	.01	0	.520	2.3	.250	<.010
18-19...	<.010	4	.01	0	.290	1.3	.170	<.010
19-20...	<.010	7	.01	0	.330	1.5	.290	<.010
20-21...	<.010	3	0	0	.180	.80	.220	<.010
21-22...	<.010	7	.01	0	.440	1.9	.440	<.010
22-23...	<.010	7	.01	0	.400	1.8	.280	<.010
23-24...	<.010	2	0	0	.130	.58	.180	<.010

311625087390701 PRECIPITATION STATION NEAR URIAH, AL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	TOTAL PRECIP-ITATION FOR DEFINED PERIOD (IN)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH (STAND-ARD UNITS)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
JUN							
02-03...	0.20	22	--	3.95	1	1	0.20
05-06...	.40	11	16	4.64	0	0	.06
07-08...	1.20	14	12	4.58	0	0	.04
08-09...	1.70	9	8	5.18	0	0	.07
14-15...	1.20	12	11	5.31	1	1	.35
15-16...	.80	10	13	5.22	0	0	.06
18-19...	.50	29	25	4.54	1	1	.30
19-20...	.10	39	30	4.16	1	1	.26
22-23...	.50	11	8	4.77	0	0	.06
25-26...	.80	35	25	4.38	0	0	.03
26-27...	2.50	45	37	4.18	0	0	.03
27-28...	.50	9	8	5.19	0	0	.03
28-29...	.60	8	6	5.05	0	0	.04
JUN 30-JUL 01.	1.50	16	13	4.68	0	0	.03
JUL							
01-02...	.25	17	15	5.07	1	1	.15
02-03...	.92	19	13	5.60	1	1	.18
04-05...	.20	12	9	5.31	0	0	.12
08-09...	.35	25	19	4.72	1	1	.25
09-10...	.25	40	31	4.38	1	1	.25
11-12...	.25	42	34	4.21	0	0	.08
18-19...	.30	17	20	4.37	0	0	.14
20-21...	.10	20	13	4.54	0	0	.16
22-23...	.15	23	17	4.63	1	1	.14
24-25...	.20	18	12	4.91	0	0	.07
26-27...	.35	33	18	4.29	0	0	.10
27-28...	.09	30	--	4.47	1	1	.14
AUG							
07-08...	.25	56	--	3.98	1	1	.24
21-22...	1.01	12	10	5.20	0	0	.03
22-23...	.20	18	12	4.92	1	1	.11
29-30...	.13	85	87	3.78	0	0	.09
SEP							
11-12...	.20	--	70	3.74	1	1	.21
12-13...	.10	--	26	4.14	0	0	.09
24-25...	.70	12	8	4.78	0	0	.03
25-26...	.10	12	6	4.86	0	0	.04

MONROE COUNTY

311625087390701 PRECIPITATION STATION NEAR URIAH, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCOTBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	PH LAB (STANDARD UNITS)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JUN									
02-03...	0.06	0.46	51	0.2	0.16	3.76	9.1	0.89	0.05
05-06...	.05	.27	39	.2	.43	4.82	1.9	.48	.03
07-08...	.01	.07	46	.1	.03	4.71	1.0	.11	.04
08-09...	.06	.20	26	.1	.62	5.80	.65	.34	.02
14-15...	.11	.61	49	.2	.06	5.68	.97	1.2	.02
15-16...	.07	.05	4	0	1.5	6.68	1.0	.19	.01
18-19...	.09	.52	48	.2	.07	4.51	2.6	1.0	.04
19-20...	.07	.40	46	.2	.06	4.20	3.1	.59	.02
22-23...	.03	.19	56	.2	.04	4.94	.51	.30	.01
25-26...	.01	.04	36	0	.03	4.30	2.5	.09	.03
26-27...	.01	.02	25	0	.01	4.10	4.0	.10	.02
27-28...	.01	.05	43	.1	.02	4.83	.50	.10	.02
28-29...	.02	.14	61	.1	.01	5.00	.34	.23	.01
JUN 30-JUL 01.	.01	.05	46	.1	.01	4.54	1.3	.13	.03
JUL									
01-02...	.05	.30	50	.2	.05	4.63	1.6	.49	.03
02-03...	.05	.40	49	.2	.20	5.42	2.3	.49	.02
04-05...	.06	.36	56	.2	.05	4.85	.79	.59	.02
08-09...	.05	.17	28	.1	.09	4.50	1.9	.36	.03
09-10...	.05	.15	26	.1	.06	4.26	3.4	.36	.03
11-12...	.02	.14	48	.1	.04	4.21	3.3	.25	.03
18-19...	.03	.10	26	.1	.11	4.38	2.3	.28	.03
20-21...	.03	.06	18	0	.05	4.65	1.2	.18	.02
22-23...	.05	.29	49	.2	.08	4.64	1.7	.55	.02
24-25...	.04	.12	29	.1	.23	4.62	.95	.42	.01
26-27...	.03	.10	32	.1	.07	4.42	1.8	.19	.02
27-28...	.09	.11	20	.1	.18	--	1.9	.42	.03
AUG									
07-08...	.03	.09	19	0	.07	4.07	4.5	.24	.02
21-22...	.02	.13	59	.1	.03	4.95	.52	.22	.01
22-23...	.10	.65	63	.3	.12	5.02	.56	1.1	.02
29-30...	.05	.28	53	.2	.08	3.78	8.0	.42	.02
SEP									
11-12...	.06	.25	37	.1	.11	3.79	8.1	.40	.09
12-13...	.05	.08	25	0	.07	4.31	2.3	.28	.02
24-25...	.01	.03	32	0	.02	4.91	.73	.10	.02
25-26...	.01	.09	43	.1	.09	5.18	.41	.16	.01

MONROE COUNTY

311625087390701 PRECIPITATION STATION NEAR URIAH, AL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

BEGINNING-ENDING DATE 1/	BROMIDE DIS-SOLVED (MG/L AS BR)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
JUN								
02-03...	<.010	16	0.02	0	0.950	4.2	0.460	<.010
05-06...	<.010	4	.01	0	.140	.62	.340	.040
07-08...	<.010	2	0	0	.130	.58	.090	<.010
08-09...	<.010	3	0	0	.080	.35	.200	.010
14-15...	<.010	4	.01	0	.130	.58	.100	<.010
15-16...	<.010	5	.01	0	.120	.53	1.20	.130
18-19...	<.010	6	.01	0	.300	1.3	.290	<.010
19-20...	<.010	6	.01	0	.420	1.9	.070	<.010
22-23...	<.010	2	0	0	.170	.75	.100	<.010
25-26...	<.010	4	.01	0	.200	.89	.200	<.010
26-27...	<.010	5	.01	0	.190	.84	.060	<.010
27-28...	<.010	1	0	0	.110	.49	.040	<.010
28-29...	<.010	1	0	0	.090	.40	.010	<.010
JUN 30-JUL 01.	<.010	2	0	0	.110	.49	.010	<.010
JUL								
01-02...	<.010	4	.01	0	.210	.93	.180	<.010
02-03...	<.010	5	.01	0	.170	.75	.630	.020
04-05...	<.010	3	0	0	.150	.66	.080	<.010
08-09...	<.010	5	.01	0	.390	1.7	.280	<.010
09-10...	<.010	7	.01	0	.470	2.1	.300	<.010
11-12...	<.010	5	.01	0	.330	1.5	.070	<.010
18-19...	<.010	5	.01	0	.370	1.6	.230	<.010
20-21...	<.010	3	0	0	.280	1.2	.150	<.010
22-23...	<.010	5	.01	0	.360	1.6	.340	<.010
24-25...	<.010	3	0	0	.180	.80	.010	<.010
26-27...	<.010	4	.01	0	.360	1.6	.170	<.010
27-28...	<.010	5	.01	0	.340	1.5	.220	<.010
AUG								
07-08...	<.010	8	.01	0	.650	2.9	.290	<.010
21-22...	<.010	1	0	0	.090	.40	.030	<.010
22-23...	<.010	4	0	0	.170	.75	.070	<.010
29-30...	<.010	12	.02	0	.650	2.9	.300	<.010
SEP								
11-12...	<.010	13	.02	0	.740	3.3	.300	<.010
12-13...	<.010	5	.01	0	.380	1.7	.200	.020
24-25...	<.010	1	0	0	.080	.35	.070	<.010
25-26...	<.010	1	0	0	.070	.31	.070	<.010

1/ Beginning is date bucket placed in the collector; ending is date bucket and sample were removed.

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	$2.54\text{x}10^{1}$	millimeters (mm)
	$2.54\text{x}10^{-2}$	meters (m)
feet (ft)	$3.048\text{x}10^{-1}$	meters (m)
miles (mi)	$1.609\text{x}10^{0}$	kilometers (km)
	Area	
acres	$4.047\text{x}10^{3}$	square meters (m^2)
	$4.047\text{x}10^{-1}$	square hectometers (hm^2)
	$4.047\text{x}10^{-3}$	square kilometers (km^2)
square miles (mi^2)	$2.590\text{x}10^{0}$	square kilometers (km^2)
	Volume	
gallons (gal)	$3.785\text{x}10^{0}$	liters (L)
	$3.785\text{x}10^{0}$	cubic decimeters (dm^3)
	$3.785\text{x}10^{-3}$	cubic meters (m^3)
million gallons	$3.785\text{x}10^{3}$	cubic meters (m^3)
	$3.785\text{x}10^{-3}$	cubic hectometers (hm^3)
cubic feet (ft^3)	$2.832\text{x}10^{1}$	cubic decimeters (dm^3)
	$2.832\text{x}10^{-2}$	cubic meters (m^3)
cfs-days	$2.447\text{x}10^{3}$	cubic meters (m^3)
	$2.447\text{x}10^{-3}$	cubic hectometers (hm^3)
acre-feet (acre-ft)	$1.233\text{x}10^{3}$	cubic meters (m^3)
	$1.233\text{x}10^{-3}$	cubic hectometers (hm^3)
	$1.233\text{x}10^{-6}$	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	$2.832\text{x}10^{1}$	liters per second (L/s)
	$2.832\text{x}10^{1}$	cubic decimeters per second (dm^3/s)
	$2.832\text{x}10^{-2}$	cubic meters per second (m^3/s)
gallons per minute (gal/min)	$6.309\text{x}10^{-2}$	liters per second (L/s)
	$6.309\text{x}10^{-2}$	cubic decimeters per second (dm^3/s)
	$6.309\text{x}10^{-5}$	cubic meters per second (m^3/s)
million gallons per day	$4.381\text{x}10^{1}$	cubic decimeters per second (dm^3/s)
	$4.381\text{x}10^{-2}$	cubic meters per second (m^3/s)
	Mass	
tons (short)	$9.072\text{x}10^{-1}$	megagrams (Mg) or metric tons

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